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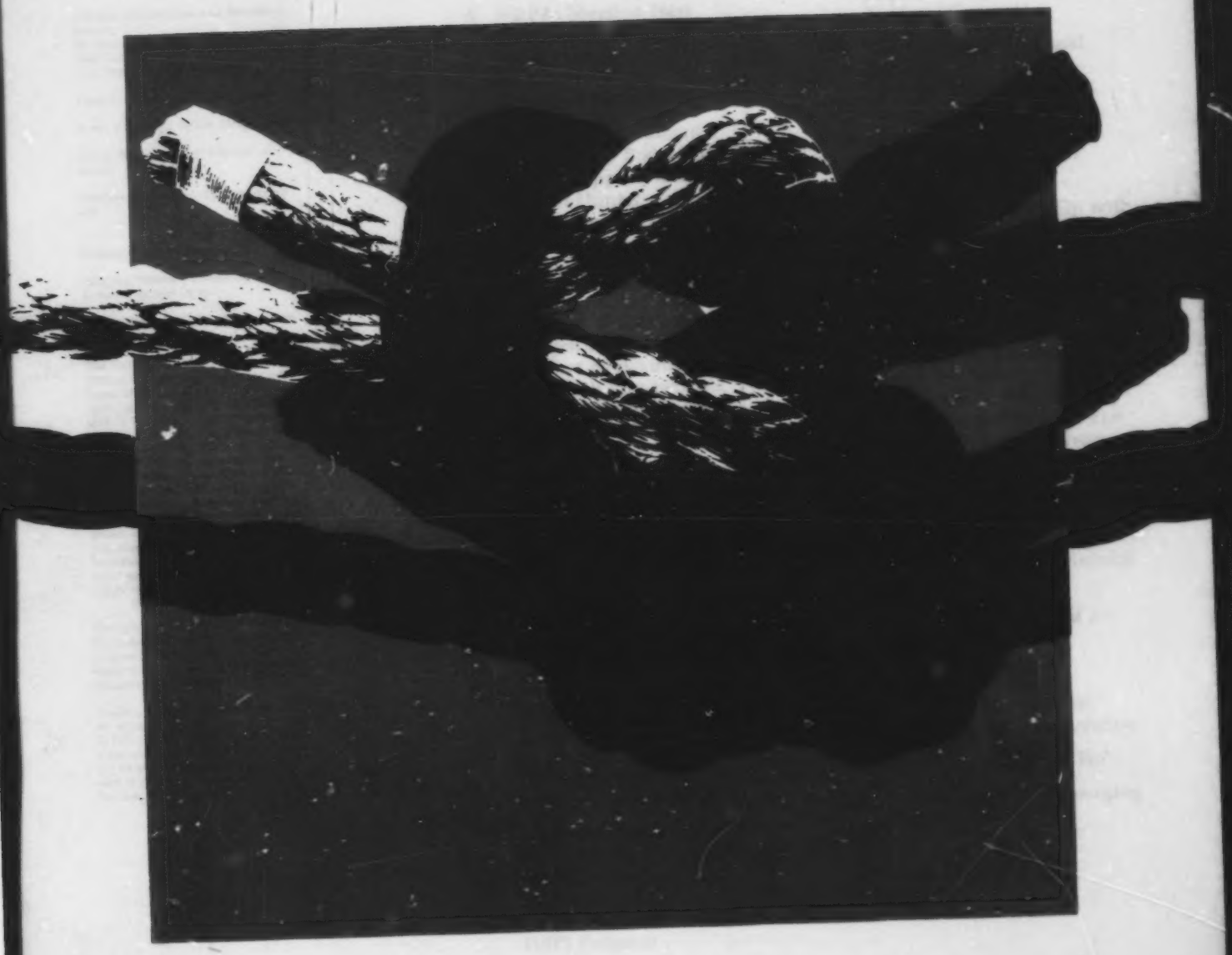
Partnerships for Survival



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The Park Practice Program is a cooperative effort of the Heritage Conservation and Recreation Service and the National Recreation and Park Association.

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The information presented in any of the publications of the Park Practice Program does not reflect an endorsement by the agencies sponsoring the program or the editors.

Articles, suggestions, ideas and comments are invited and should be sent to Park Practice Program, U.S. Department of the Interior, Heritage Conservation and Recreation Service, Division of Park and Recreation Technical Services, Washington, D.C. 20243.

Contents

Trends in Partnerships for Survival

2 Introduction
by Chris Therral Delaporte
Director, HCRS

4 NRPA: Meeting New Challenges Through Partnerships
by John H. Davis
Executive Director, NRPA

6 Business/Government Partnerships Boost Public Leisure Opportunities
by Tish Hunter
Some examples and practical tips on approaching the corporate sector

10 Contractual Services: A Catalyst for Partnership
by Clare Beckhardt
New York City benefits from innovative State program

15 From the Ground Up
by Mayor Jim McConn
How Houston built its park and recreation resources

18 Why Volunteer?
by Kerry Kenn Allen
Motivations behind volunteerism and their implications for managers

21 Volunteer Partnerships at Jefferson National Expansion Memorial
by Peggy O'Dell
Dynamics of a good volunteer program

23 Legal and Logistical Aspects of a Volunteer Program
by Betty Murphy
The NPS Volunteer in Parks (VIP) Program

25 Santa Monica Mountains National Recreation Area
by Robert S. Chandler
Implementing an Area of National Concern

29 The Pinelands National Reserve
by Sean Reilly and Chick Fagan
Evolution of a new landscape preservation partnership

32 PEPCO: In Partnership with the Community
by James H. Parsons, Stephen M. Genua, and D. Scott Gravatt
Sharing utility rights-of-way

34 The W&OD Railroad Regional Park
by Darrell G. Winslow
From rails to trails through partnerships in Northern Virginia

37 Partnership Dynamics
by Howard Levitt and Ray Murray
How to establish successful partnerships

44 HCRS: A Partner and a Partnership Broker
by Meg Maguire
Coordinated action multiplies benefits for recreation and preservation

47 Who Can You Turn To?

48 Letter from Your Managing Editor

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Introduction

by Chris Therral Delaporte

> *"The challenge of enhancing recreation opportunity cannot be met by government action alone. New Partnerships among all levels of government and the private sector will be required. New ways of combining resources from a variety of existing programs must be tested to meet our Nation's recreation needs."*
>
> President Jimmy Carter
> Message to the Congress of
> the United States
> Upon transmittal of the
> Third Nationwide Outdoor Recreation Plan

Was Woodrow Wilson too optimistic when he expressed the view that "the highest and best form of efficiency is the spontaneous cooperation of a free people"? Isn't it naive to expect the people and institutions of a peacetime society to rouse themselves spontaneously to a common purpose, and to pursue that purpose cooperatively and with efficiency?

I think not. This issue of TRENDS offers abundant documentation of the cooperative capabilities of people and institutions—partnerships that spring up and sustain themselves in behalf of causes not associated with the immediate demands of survival.

Wilson refers explicitly to cooperation among a *free* people; that qualifying adjective takes his words beyond naivete and optimism and makes them valid. While President Wilson was undoubtedly speaking of the wartime efforts of a people who were free politically, freedom, albeit of a more subtle kind, is the driving force in *any* cooperative success.

Those of us concerned with recreation improvement have learned that too narrow a view of our mission imprisons our thinking and shackles our ability to form productive alliances with others. Old formulas—like plentiful dollars = land/building = Recreation Improvement—no longer apply, because in any specific situation, one or more of the variables of need and resources have changed. Dollars are not plentiful. Land acquisition costs are nearly prohibitive, and too many existing facilities need repairs. And in some cases, recreation would not be significantly improved with the simple addition of more parkland or a new recreation center.

However, if we re-think our mission, and come to see it as one of improving people through recreation, the tools of creative cooperation become ours.

Recreation Integrated with Other Human Needs

In its natural state, life occurs in integrated form. People's needs don't occur singly, or serially. People need not only recreation opportunities, but housing, transportation, health care, jobs and financial certainty, a sense of physical safety, exposure to books and the arts, and a host of other things. As individuals, we need these things according to the random order of individual lives, not according to a this-one-today-and-that-one-tomorrow timetable. As a society, we need them all at the same moment.

It is when we recognize that recreation needs occur inherently among a formidable array of other human needs that freedom first becomes an actor in the process of creating a partnership.

Before we even begin a dialogue with a potential partner, we must free ourselves of the notion that recreation can *ever* be dealt with apart from other issues.

Our usual approach to the world and to our work—as park and recreation professionals, as agents of this or that institution, as local, state, or federal entities—often limits our ability to appreciate all the dimensions of a matter before us. As park practitioners, we are able to see quickly some of the fruits of our labors, and we are gratified by the positive responses of a recreation-hungry public. However, the unarguable significance of our recreation achievements sometimes obscures a larger view of the considerable role we play in the development of other public policies.

If we believe with conviction that our business is to improve human lives through recreation, and not just to "improve recreation," we find ourselves thinking differently. Ultimately, we find ourselves behaving differently in both our professional world and in the community at large.

When transportation policies are proposed and aired, we will hear our own voices in the debate, asking how these bear on recreation policies, and vice versa, asking what opportunities there are for bikeways, in transit corridors, for recycling of abandoned railways, for using school buses on weekends to get from the city to state parks.

When we read in the morning paper that our community experiences high rates of stress diseases, we will ask what opportunities there are for encouraging exercise and fitness in our parks and recreation facilities as part of our city's overall health promotion efforts.

And when new economic developments or new communities are planned, we will be ready to work with developers and local transportation officials to incorporate open space and recreation access considerations into their planning process. What will the quality of life be in these new and expanded communities?

There is potential for improving human lives through recreation in all of these examples. There is partnership potential for recreation professionals in them as well. Realization of this potential depends on our initial readiness to see recreation interests in the fabric of all public decision-making.

What must follow is a willingness to bring the public recreation trust to people where they need it, and in the context in which that need is expressed.

The days of public fund surpluses are over. All public priorities are becoming more refined and more explicit. The public is rightfully insisting that we, as holders of the public trust, return the maximum benefit on every tax dollar it invests. As trustees of the recreation dollar, we can no longer meet with the public alone to discuss its parks or recreation programs. We must take a clear and unconfined sense of our recreation mission into the meeting rooms of our co-trustees in other fields.

We know that recreation is a health matter, and we know that vandalism and crime affect recreation opportunities. We know that trends and changes in housing, economic development, and transportation policy influence recreation demands. We must search vigorously for the points at which recreation interests intersect with other policy and program interests, and we must pursue the crosspaths we find.

Recreation interests can be found in almost every setting where human beings exist; thus, opportunities abound for purposeful and creative partnerships in pursuit of a common goal. As in everything though, some fundamental principles apply.

Self-Interest a Crucial Component

The term "partnership" should be used with care, and not as a label for just any arrangement to transfer funds from one entity to another. A partnership exists because all parties involved can achieve something through the partnership that they cannot achieve alone, or cannot achieve as well alone. It is important that each party have an institutional self-interest, something at stake, in the partnership. Relationships begun through coercion, or independent fiat, will not last.

The New Jersey Pine Barrens, the subject of an article in this issue, is a good illustration of differing but compatible motives converging in a partnership that serves the interests of the individual partners, and produces important public benefits.

All parties must have something to accomplish in the partnership, and all parties must have resources to bring to it.

In Houston, a city of abundance with some special problems of open space and recreation need, an alliance among business and the federal, state, and local governments has been formed to deal with these problems. The partnership is grounded in a set of goals that is clearly delineated. While there is unity of purpose to the effort, the functions of each of the partners differ both by design and by agreement.

Partnerships require patience. Whether a partnership takes the form of an administrative, inter-agency agreement or a complex, multi-tiered structure with substantial money at stake, there will be many players involved in it. Behind each player is a set of processes—regulatory, legislative, etc.—which that player will have to assume responsibility for administering in behalf of the partnership. Many of these responsibilities will be managed out of view of the other participants, who should sympathetically allow their partner a judicious amount of time and freedom to accomplish what must be done. Though these processes sometimes seem to move much too slowly, they are, by definition, characteristics of any cooperative effort and must be accepted.

Commitment to Partnership

A partnership is always a commitment, and it should be a commitment to perform with maximum results. In the beginning, prospective participants should explore together honestly all the needs or issues which bring them together. Both goals and terms of agreement should be based on a thorough examination of each participant's capabilities and resources. This examination should be carried out in an atmosphere that, for a time, places individual job titles, jurisdictional boundaries, and conventional operating methods second to determining all of the practical measures that could be taken if it were in the prospective partners' interest to do so. All resources and capabilities should be scrutinized and to the extent possible, viewed with fresh eyes. Knowledge, expertise, and experience with the tools of planning and technical assistance must be valued and assigned a role. Money is often important, but it need not be, and should not be, the only bond between partners. A pledge of regulatory consistency by a key partner, or a promise of supportive zoning, can be as critical a term of agreement as any promise of funds.

I firmly believe that one of the by-products of free interplay between recreation and other areas of public policy will be a greater and more creative efficiency in all public decision-making.

The urge to remove constraints, and the drive towards interdependence, are in many ways more natural, in the fullest sense of the word, than our balkanized, man-made bureaucracies. Those of us in the conservation field do not have to go far to witness the exquisite efficiency of nature, a realm where interdependence is survival itself. The natural world seeks supporting relationships freely and spontaneously, as demonstrated by the vine winding its way towards a fencepost for support and light.

Though survival may not be the motivation in our partnerships, there is urgency in our mission to bring the healthy benefits of recreation into the organic framework of human lives. As the most refined exponent of nature, we should be making cooperation one of the highest arts of human organization.

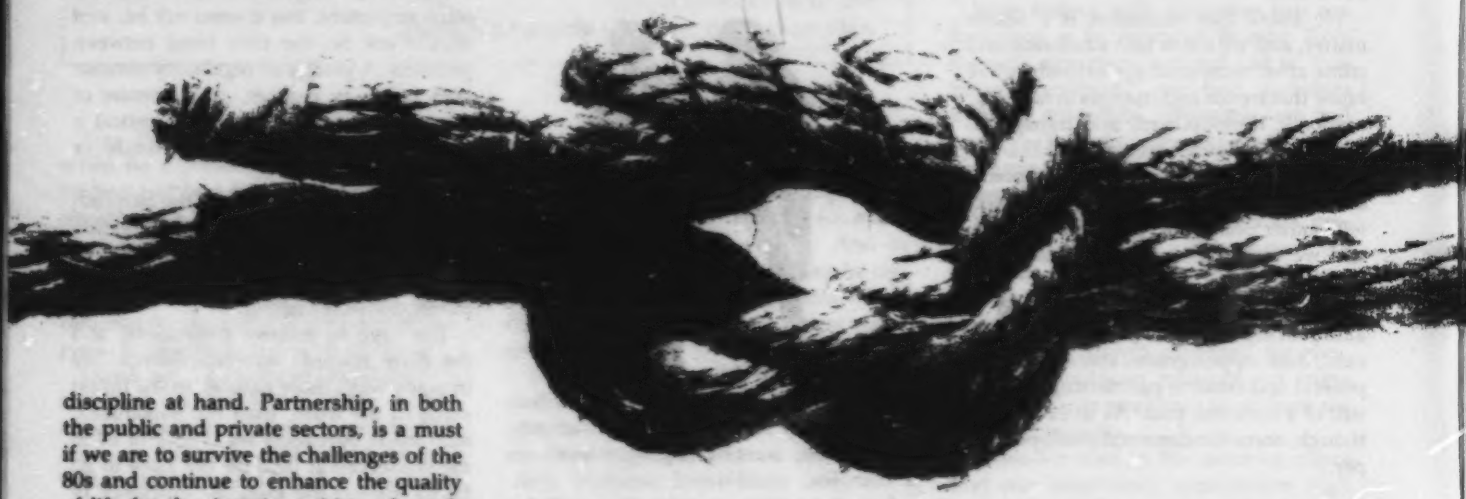
Chris Therral Delaporte is Director of the Department of the Interior's Heritage Conservation and Recreation Service.

NRPA: Meeting New Challenges Through Partnerships

by John H. Davis

We enter the 1980s with a sense of certainty, a certainty that the park and recreation movement will be plagued by increasing inflation, increasing demands for service, and decreasing revenues. The energy crunch—its promise both of uneven supplies and higher costs—will impact heavily upon our field. It is clear that the 1980s will not be a decade for timidity in those of us in the park and recreation field.

Never has it been more critical for those of us who care about providing for and maintaining our two most vital resources—human and natural—to join together to form strong alliances so that we may make the best possible use of every discipline at hand. Partnership, in both the public and private sectors, is a must if we are to survive the challenges of the 80s and continue to enhance the quality of life for the American citizen through the provision of recreation and park services.



Certain NRPA relationships and alliances have served the best interests of their partners over the years. However, I question if those partnerships have *always* best served our constituencies. As we look to strengthening existing partnerships and forming new ones, I suggest that more thought be given to their eventual impact upon those we serve.

NPRA Partnership Endeavors

But let's look at some of our accomplishments. Over the years the National Recreation and Park Association, the National Park Service, the Bureau of Land Management, Fish and Wildlife Service, and the Heritage Conservation and Recreation Service have sought to secure adequate open space with appropriate and equitable recreation opportunities. Over the years NRPA has been a strong advocate in moulding public policy decisions in a wide range of park and recreation issues. I suggest this is a suitable role and one which should continue.

In another partnership, NRPA has joined hands first with the National Park Service and now the Heritage Conservation and Recreation Service to publish the Park Practice Program—perhaps the most useful of all technical assistance programs. Park Practice, with its three component publications—*Trends*, *Design*, and *Grist*, has served the profession for over 23 years. *Trends* has provided broad-based expertise on the issues of park and recreation management, always illustrating new trends and a sensitive concern for the practitioner. *Design* has been an invaluable guide for those who plan the best use of the environment at hand and particular parkland sites; it offers the latest development in design for structures and facilities. *Grist*, on the other hand, has always served the practitioner with the most basic how-to ideas and suggestions which can be applied to park and recreation settings best suited to a broad-based clientele.

Some less visible (but no less viable) cooperative efforts of NRPA include input into the National Urban Recreation Study, the National Outdoor Recreation Plan, the long sought and now highly valuable Urban Recreation Recovery Program, and many others. NRPA's input has been sought and given on the subject of water quality's affecting the efforts of the Fish and Wildlife Service and the Environmental Protection Agency. Even recreation has borne fruit of joint efforts as tennis courts are developed atop waste water treatment plants and railroad rights-of-way are converted to biking and hiking trails.

These are but a few of the examples of how cooperation, information, and "wool gathering" sessions have paid off—paid off in a better quality of life and improved service to people, achieved while main-

taining basic environmental integrity. Partnerships of the past like these must continue to be nurtured. But new partnerships also must be explored.

Economics and Demographics Necessitate New Initiatives

As we look to the future and the changing patterns of life now emerging—we must extend those parameters. Last summer's energy crunch, for example, stimulated some local park and recreation leaders' thinking about in-town campsites. Desire for camping experience is not likely to diminish, even though gas prices continue to soar. How are we to provide alternate resources to meet this and other recreation experiences?

Our very population is changing; the baby boom is over and we now deal with an emerging "older" population of 35 and above. During the 80s, 70 percent of our citizens will be adults. More than 50 percent of adult women will be in the workforce. These and other demographics will challenge us to change our mode of thinking. Traditional methods of programming rapidly are becoming obsolete. We shall have to change our park and recreation facility use patterns, even our hours and days of programming.

Can we—the federal sector and NRPA—do it alone? No. We need the help of other agencies.

More than ever we need to *forge alliances*, not merely establish relationships with other organizations. We need to work closer with organizations now serving the elderly, the drug culture, and unemployed youth. We need to reach people whose jobs have become automated and boring, those who, for want of other positive things to do, spend an inordinate amount of time watching the "tube."

NRPA is seeking alliances in these areas. To the limit of our resources, we interface with organizations like the National Council on Aging, the AARP, the American Institute of Architects, the Conference of Mayors, and the League of Cities. We are working with the National Urban Recreation Committee on a campaign to alert alienated members of our society to what opportunities await them.

During the latter part of the 70s, California's Proposition 13 and similar tax cutting initiatives swept the country. Some of our more enlightened professional and lay leaders sought the help of the private sector. In California, for example, Kaiser Aluminum and Chemical Corporation liked the "adopt-a-park" idea and has committed substantial resources to park and recreation systems. Many other communities, notably Portsmouth, Virginia, have turned to the community for monetary assistance and have received it. In addition, volunteers have helped with maintenance and have become involved in programming.

Community, school, and recreation department can come together to share buildings, energy costs, and parking. Plano, Texas, is an outstanding example of this type of cooperation and coordination—but the examples are too few.

It is my belief that the time has come for a massive campaign to "turn on" the American people—sensitize them to the value of parks, recreation, and leisure.

Life. Be In It.

A recent development which will enable NRPA to offer innovative programming to its agents in the field and to local park and recreation agencies, is "Life. Be In It." This is an innovative media program developed by the State of Victoria, Australia. A series of humorous TV characters have been developed to illustrate the value of simple recreational pursuits. The program has been so successful that it has achieved 97 percent "recall" on the part of citizens who have seen the TV spots.

NRPA expects to use certain high-population areas as test sites for introducing this program in the United States as a public service media campaign and for special events and programs. In addition, NRPA is seeking full sponsorship to expand this media campaign nationwide.

This type of program, designed to enhance public perception of the value of constructive leisure pursuits, should have significant impact upon public policy relating to parks and recreation. But, to be successful, it *must* be conducted by local park and recreation agencies. It would be hoped that this type of program can be used to counter negative effects of tax-cutting limitations such as Proposition 13 and Proposition 4. Used properly, the program can heighten citizens' interest in the protection of park and recreation opportunities for all people.

To conclude, a massive "re-think" is called for on the part of all of us who are in the business of preserving our nation's precious human and natural resources. Only through the formation of strong alliances, with all parties pulling together, will a difference be made in American recreation in the 1980s and beyond.

John H. Davis is Executive Director of the National Recreation and Park Association.

Business/Government Partnerships Boost Public Leisure Opportunities

by Tish Hunter

As the country moves into the 80s, a time of fiscal constraints and projected energy shortages, park and recreation professionals eager to improve and enhance the nation's network of open, public spaces will find their commitment, imagination, and managerial ability severely tested.

The problems created by limited resources at a time of increasing public demand for leisure opportunities, have become too complex and too diverse for public recreation agencies alone to handle. The time is ripe for partnership, especially for the close cooperation of government and the business community organized to provide more and better public leisure amenities for our nation's citizens.

A partnership is an ongoing give and take relationship; not a one-way, one-time flow of resources. Not that there is anything wrong with seeking one-way contributions of money or land. But public recreation agencies should not overlook the opportunity to use business resources in more imaginative ways for more long-term benefits.

Concession operations represent another type of partnership. NPS

An Innovative Partnership Example

Consider the imaginative partnership program that the East Bay Regional Park District in Oakland, California, has initiated to tap business resources.

The East Bay Regional Park District is a limited purpose governmental agency providing regional parks and recreation to more than 1.5 million residents of two California counties. In 1977, it was faced with a crisis: Proposition 13. Almost overnight the Park District went from being a taxing agency to one dependent on handouts from the California State Legislature. In response to cutbacks in the park budget occasioned by Proposition 13, Richard Trudeau, general manager of the Park District, set in motion a program for long-term corporate support.

Kaiser Aluminum & Chemical Corporation, based in Oakland, has become the corporate spearhead of the program. Last year, Kaiser signed a letter of agreement with the Park District, pledging $40,000 in cash and in-kind services for the first year of a projected three-year program to "adopt" the Roberts Recreational Area of Redwoods Regional Park, a park area near the homes of Kaiser employees.

The "adopt-a-park" program is designed to relieve the Park District of some of its park operations burdens. As set up by Mr. Trudeau, it is a program customized to fit the needs of both the park and the corporation which "adopts" it. The corporation and Park District staff work out an improvement program and the corporation signs a letter of agreement with the Park District to carry out a specific improvement program over a period of usually three years. The chosen parks usually are tied closely to corporate location or employee residential areas. At the end of the three-year commitment, everyone will sit down again to evaluate "adopting" yet another park in the system.

The approach used by Mr. Trudeau to win over corporations is very personal, requiring substantial courtship of local businesses and high visibility for the individuals and companies involved. Kaiser, for example, has won several national and local awards.

Kaiser's awards reflect the commitment that the company made in its first year, 1979, to Roberts Park. This included providing new park play equipment, installation of a solar heating device for the swimming pool, and arrangement for free summer bus transportation for low-income residents.

Not only did the company commit cash to the work, but Kaiser employees were intimately involved in the planning and execution of these improvements. The play area, for example, utilized Kaiser engineers, Kaiser equipment, and was installed by 70 Kaiser employees over a weekend.

Cornell Maier, president of Kaiser, carried his company's involvement even one step further. At a luncheon for forty corporations from the East Bay Region, hosted by the Park District and Kaiser, the company assumed the role of a mentor—actively encouraging other corporations to join the "adopt-a-park" business and increase their corporate philanthropy.

Other Kinds of Viable Partnerships

Partnerships between business and public agencies concerned with parks and recreation can take other forms:

- A city may work with business to provide public recreation on private property. In certain dense urban areas like New York City, special zoning and city requirements encourage the creation of open space in exchange for certain development rights. A corporation can be encouraged to work with the city to create valuable, vest pocket parks. An outstanding example is Exxon Park in New York City's Rockefeller Center.

Employees of Kaiser Aluminum and Chemical Corporation help construct a play structure in their adopted park.
Kaiser Aluminum and Chemical Corporation

Children enjoy the completed structure.
Kaiser Aluminum and Chemical Corporation

- Private entrepreneurs may become involved in the reclamation of recreation structures. Part of a recreational pier in Baltimore, for example, will be leased to a maritime-related business as a way to increase revenue and to attract the public to the site. Off-business hours will see an intensification of recreational uses of the pier.
- Public agencies may establish a cooperative sponsorship with local corporations to underwrite transportation to park and recreation areas from in-city locations. This may involve extension of routes and/or hours, special fares for senior citizens and children, seasonal access routes, and routing in conjunction with special events. Such a program is in effect in Oakland between the East Bay Regional Park District, the East Bay Regional Transit Authority, Kaiser Aluminum & Chemical Corporation, and Chevron, U.S.A.
- Special events for the public may be underwritten entirely by business. The Pepsi-Cola Bottling Company sponsors marathon races in parks and streets throughout the country. In Buffalo, a free summer music program is presented by the M & T Bank to encourage the public use of the plaza/park surrounding its bank tower.
- Concessions run by private business are encouraged in many parks and public spaces to provide facilities and services the public agency cannot afford. Concessionaires operate the hotels and lodges in our national parks, marinas in Orange County, California, and the riding stable in New York City's Central Park to name just a few. Along that portion of the C & O Canal National Historical Park running through Georgetown in Washington, DC, the National Park Service allows restaurants bordering the canal to extend their cafe seating onto park property. As long as the use is not exclusionary, no lease is required since the Park Service considers such usage complimentary to the urban recreation purpose of the park, even an enhancement of the public's leisure experience.

The list of examples can go on and on. What a long-term partnership can do is limited mainly by the imagination.

Problems

Getting government and business together in a partnership is not easy, especially with governmental agencies identified under the banner of open space, parks, and recreation.

Business and government agencies supplying park and recreation services tend to view each other with a substantial degree of skepticism and suspicion over motives. This skepticism and suspicion is rooted in history and image.

Having dealt with public agencies seeking only to regulate or tax, business has become defensive. Park and recreation professionals bristle from encounters with businesses coveting public open space for office towers.

Such encounters are only fuel for exaggerations. There is the image of business as an exploiter of resources, an indoor world of money and power and self-serving executives who have no concern for the well-being of society.

Perhaps more serious, since it is usually up to the park and recreation agency to initiate the partnership, is the illusion held by business and even other governmental agencies that open space, parks, and recreation are amenities whose worth in the marketplace is questionable. It is characteristic of our culture to hold amenities to be "add-ons" affordable only after more "important" matters are attended to—and first to be cut if funds are short.

Business Participation Rationale

Why does one business participate in a recreation partnership and not another? The answer lies in the nature of the business community which is complex and fragmented. The way each business responds to the physical environment and

interacts with the social and recreational aspects of our society depends on the business' circumstances and leadership.

Ask executives of companies who have been involved in open space, park and recreation partnerships why they did it and they will give such replies as: "It fulfilled a moral commitment to the city". . ."It was a gift to the citizens" (very popular during the bicentennial). . ."Our employees needed an aesthetic place to use at lunchtime". . ."We needed something to encourage people to linger, even to patronize surrounding shops". . ."We wanted to create a community that current and potential employees would find as an attractive alternative to larger metropolitan areas. The only way to create such an alternative was to improve the physical environment."

At the heart of these public statements is the desire of business to turn a profit, gain tax benefits, shed unusable assets, improve its public image, keep its employees and customers happy, and provide community service. Generally speaking then, business' motives are ones of economics, image, and social responsibility.

Business must make a profit to survive. Thus larger corporations with many resources are more apt to be involved in partnerships than the small local business struggling to make ends meet. The more a case can be made linking the economic benefits accrued from a park and recreation amenity to the economic well-being of the business or the community, the easier it will be to persuade businesses to participate in a partnership for leisure opportunities.

As much as business is driven by the profit imperative, it is even more sensitive to the image the company holds in the community. Business will, therefore, be more inclined to participate in partnerships that offer a fair amount of positive public visibility.

A sense of social responsibility also motivates business to participate. Although there are those who insist business should confine itself to economic purposes and not social issues, a few corporate voices like the Dayton-Hudson Corporation are saying that profits are not the purpose, but the rewards of having served the community and people well. This view is based on the realization that it is the people who allow the free enterprise system to flourish—for the public's, not business' benefit. Therefore, business has a social responsibility as well as an economic one to do what it can to make our communities more livable.

Can business afford to do this? "We can't afford not to," says Mervyn Morris, chairman of Mervyn's Stores, Hayward, California. "It creates a stronger community where we do business. A stronger community attracts newcomers who become customers. It improves the executive environment. And look at the tax benefits. Why let the government do this kind of spending for you?"

Why indeed? But the evidence shows that the IRS and not philanthropy is the biggest receiver of corporate funds. The 1979 annual report on American philanthropy put out by the American Association of Fund-Raising Counsel notes that although charitable donations by corporations have increased, the contributions as a portion of corporate net income before taxes equaled only one percent, well below the maximum allowable federal tax deduction of five percent.

How to Set Up a Partnership

There are over 1,700,000 corporations in this country. So how do we get more of them to join in a partnership with government to provide quality leisure opportunities? A partnership between government and business, as previously noted, is not easy to encourage, nor is it anything to enter into ill-prepared. Be warned also, that just because your park and recreation agency whips together in six months a corporate partnership program modeled on another agency's successful one, and just because you may have successfully created a partnership with local volunteer organizations and other governmental agencies, you cannot automatically assume that you will meet with equal success. Business requires special handling. However, the following suggestions may help:

- *Developing the program.*

Before you can enlist the cooperation of business in partnership, you must decide what you are going to do. Keep in mind that there are other organizations—in the arts, health, education, etc.—also seeking corporate support and that most of them have more business and fund-raising savvy than the average park and recreational professional. If need be, hire experts. Your program must be well documented and as clearly thought out as possible to be competitive.

Thus it is important to spend the time (even one to two years) necessary to develop a business-like partnership program with competent staff. It took the East Bay Regional Park District over a year to get its first corporate supporter. Your program should be: goal-specific; attuned to the down-to-earth economic and political realities that concern business; responsive to the opportunities, problems, and regulations of your park system; active in public awareness programs that build the agency's image and visibility; aware of a variety of funding and implementation strategies; well-supported with solid facts; and operated with sound management practices.

- *Finding the right business.*

Once you have a partnership or corporate support program worked out, you need to find corporations that will be compatible with it. Investigate the companies in your area. Which ones have demonstrated a pattern of community giving? Which have headquarters in the area? Identify those which might be seeking a better corporate image. Do any have specific resources (land, equipment, people-skills) you need?

Do not overlook the company's key executives. People run a company. Many companies would not have a social responsibility program were it not for the insistence of company presidents or chairmen. Does the CEO play tennis? Does the Senior Vice President live next to a park targeted to receive corporate support?

- *Selling the program.*

How do you get business interested in your program? First, you must see that the idea reaches the right people—the people in top management, ideally the president or chairman. At the upper levels of management people are able to put their company's resources where their yes is.

Cooperative ventures can bring exciting arts programming to people. NPS

How do you meet them? Write, lean on any corporate contacts, enlist the help of well-connected friends. Can your banker introduce you? If you are a local or state agency you already should have the endorsement of your mayor or governor—and his help. Getting a toe in the corporate door is always easier if good rapport exists between city hall, the governor's mansion, and the business community. Business likes to know who it is dealing with, a problem sometimes in the public sector. So it is advantageous to be located where there is a strong-mayor or a strong-governor format of government. The truly fortunate will have found a mentor—a company or business person well-respected in the business community—to open the right doors.

The best advice on the actual selling of the idea is to be flexible, be patient, and establish a good one-to-one relationship with your contact person in the company. Negotiation is the name of the game for business, so your program should be flexible enough to incorporate what business wants and can do. The final agreement must be mutually beneficial.

Some final bits of advice: Many organizations—private and nonprofit—provide technical assistance and mediation services that should be investigated and called upon for help if appropriate.

My own organization, Partners for Livable Places, a national nonprofit coalition of organizations and individuals, works to improve the quality of life and has developed a major program in the area of public space, parks, and recreation. This program "brokers" innovative and effective public space, park, and recreation programs from America and Europe so that others may learn from good examples. Conferences, research projects, exchanges among federal officials, publications, and technical assistance services form the core of the program. Assistance is individually tailored to the needs of each client and may include long-term advisory panels, concentrated problem-solving charrettes, educational workshops and symposia, and liaison with federal and/or state officials. Referrals to experts on planning, design, and management, and public space, parks, and recreation projects are offered free through the Partners' Livability Clearinghouse, 2120 P Street, NW, Washington, DC 20037.

Some past and ongoing Partner projects include:

- Organizing a task force for the New York Urban Development Corporation to discuss appropriate approaches for a statewide public space improvement plan.
- Providing research and referral services for the Administrator of New York's Central Park to organizations which have successfully developed revenue-generating mechanisms to support their park operations.
- Sending a study team from Cleveland, Ohio, to tour northern European waterfront cities to look at recreational facilities among other things (the trip was to generate ideas and support for the city's new state-financed park on Lake Erie).
- Organizing and sponsoring a Smithsonian Institute Symposia focusing on public spaces in Europe that have application to the United States.
- Publishing a book on urban waterfronts.
- Working with the City of Los Angeles to look at the feasibility and strategies of developing Los Angeles as the site of an event modeled on the German Federal Garden Show, a public and private sponsored exhibition that would result in permanent park, recreation, and transportation facilities for the host city.

For further information on this subject, readers are urged to obtain:

Private Sector Involvement Workbook, available from the Heritage Conservation and Recreation Service of the Department of the Interior, which is a valuable, in-depth guide to making the private sector a partner in providing public leisure opportunities.

Downtown Public Spaces, an illustrated publication of case studies in New York State, available from the New York State Urban Development Corporation (UDC), 1515 Broadway, New York, NY 10036.

Tish Hunter is Director of Clearinghouse Services and responsible for the special program on public spaces, parks, and recreation for Partners for Livable Places, a national, nonprofit coalition which works to improve the quality of life in our communities through the conservation and sensitive development of the physical environment.

Contractual Services: A Catalyst for Partnership

by Clare Beckhardt

About seven and a half million people or close to half the residents in New York State live in New York City. These are the people the New York State Office of Parks and Recreation set out to serve when a State Park region was established twelve years ago in New York City.

Serving a totally urban population would be a new experience for this state agency whose reputation had been earned on managing a vast scenic park system for such traditional activities as camping, fishing, boating, and hiking. Relating to the city's existing park and recreation system also would pose a challenge to the fledgling State Park region. The city had an extensive park and recreation system already in place, in need of help perhaps, but certainly not in need of duplication.

The state began the task of orienting itself to urban leisure needs and initiated programs that would bring to New York City residents their due share of state-supported recreation opportunities. Where needed and appropriate, the state established parks to provide recreation or to preserve historic or ecologically significant sites. Increased amounts of federal dollars were channelled into the city by State Parks in a program designed to rehabilitate the existing city park system and make those parks more usable for city residents. A state outreach program was developed; performing groups and activity workshops were scheduled at community-based facilities throughout the city to stimulate program development and staff training. Another program, which will be the focus of this article, created partnerships; a recently-released New York State Parks and Recreation report on a Contractual Services Program in its New York City Region described the program as follows:

"At the heart of the state's effort in New York City is a relatively simple strategy—to make the most of the vast physical and human resources currently available. In this process, the state functions as a catalyst, matching resources and needs, interfacing with hundreds of organizations and, ultimately, selecting a limited number of strategic projects to fund and coordinate under contract to the state."

The Volunteer in the Parks Program generates park improvement projects such as mural painting.
State Park Commission for N.Y.C.

Integral Concepts

The several concepts expressed in that statement form the basis of the state's Contractual Services Program:

- *Needs and resources are matched.*

The process of matching needs and resources began in 1975 when the state organized and consulted with a task force representative of the public and private/voluntary park and recreation agencies in New York City. The purpose of this consultation was to identify a state role that could best meet the leisure needs of New York City. A program of contractual services became the recommended course of action; but out of that consultation and planning process, areas of need or priority were identified to guide the state in its funding of projects. Those areas of need were a stimulation of city delivery systems, environmental education, training and employment, and transportation to recreation. Then came the task of matching resources to those identified needs.

- *Make the most of the vast physical and human resources currently available.*

In matching resources and needs, the state's contractual services program sought out resources already in place. Existing resources were, therefore, enriched or supplemented, and duplication was avoided.

For example, a project to stimulate city delivery systems emerged from a need for indoor recreation spaces. The physical resource, the school, exists in great number throughout the city; but that resource in too many areas of the city is closed for community recreation uses unless an opening fee, generally exorbitant for community-based organizations, is paid.

The human resource is any community-based group known for its leadership role in the community and already organized to provide multi-faceted services.

Once the needs and the resources were identified, they were ready for matching.

- *The state functions as a catalyst.*

In matching needs and resources, the state acts as catalyst. Funds are provided by the state under certain criteria to put the project in motion.

Take the project of opening school facilities for community recreation use as an example. As the catalyst, the state provides funds for opening fees as well as some recreation program costs. But certain criteria must be met by the contracted community organization. As part of the state-community organization partnership, the community group agrees to match state funding with in-kind services and/or funding from other sources; to create other partnerships by seeking out other groups that will share the cost of school opening fees; and to stimulate the appropriate public agencies into broadening the community use of schools.

Ecology is observed firsthand through Operation Explore. State Park Commission for N.Y.C.

- *A limited number of projects are selected for funding and coordination under contract to the state.*

A basic criterion in the state's Contractual Services Program is that a funded project should have city-wide impact or, if successful as a pilot, be replicable in other areas of the city. Another equally important criterion is that the funded project is expected to lead to policy changes that will improve the delivery of recreation services.

By the very nature of these criteria, the number of projects must be limited. Projects are carefully selected, monitored, and independently evaluated for their effectiveness and for their identification of problems to be resolved.

It also is expected that after a reasonable period of state funding, generally not to exceed three years, a successfully implemented project will continue without state support. This goal is reached because the desired policy change has been effected. The project becomes a basic programmatic component of the appropriate agency and is supported by that agency. Or, the project becomes self-sustaining through solid support from other resources.

Upon completion of its planning and consultation process, the state developed guidelines and solicited proposals. The task force that assisted the state in formulating its Contractual Services Program continued to function in an advisory capacity by reviewing the submitted proposals. Recommendations by the task force are considered by the state.

State Funds Achieve Maximum Impact

Since 1976, a number of projects have received state funds. The range of projects are associated with the identified areas of need and include such programs as community use of schools, volunteers in the parks, the establishment of community recreation resource centers, a training institute, mobile gardening and nutrition services, and outdoor environmental education classes. In any one given year, no more than $200,000 in state funds was available; but during the 1978–1979 funding year, the thirteen funded projects leveraged more than double the amount of available state funds in other cash or in-kind resources.

Statistics also show that since the program's inception, funded projects have brought recreational experiences directly to about 100,000 people of all ages. It is estimated that hundreds of thousands more have benefitted directly from improvements in their community parks because of the program's training projects for workers and volunteers. Some 500 community organizations have had varying degrees of involvement with the program.

How these projects are conceived, planned, placed under contract to the state, and implemented can best be described by detailing two projects. One project, the Training Institute of the City of New York, addresses itself to the need for training and employment. The second project, Operation Explore, relates to the need for environmental education.

Evolution of a City/State/Union Partnership

The Training Institute of the City of New York was established this past year as a cooperative venture of the New York State Office of Parks and Recreation, the New York City Department of Parks and Recreation, and the New York City Recreational Employees Local 299. This unique partnership of state, city, and union evolved from common needs and interests. The institute's genesis began in 1977 when the state, in recognition of the need for training, funded a two-day workshop program in recreation staff training for summer youth employment workers and supervisors. As stated by the program's consultant in her evaluation report, "the primary objective of this [training] program is to upgrade recreation in the City of New York by training leaders so that they may better teach their participants in a recreation service setting."

Eight workshops were planned for the two-day program, held at Roberto Clemente State Park. Skilled instructors were contracted to teach arts and crafts, leadership, sports instruction, playground and street games, physical fitness, puppetry, dance, and music. A looseleaf training manual, containing materials for each of the activity workshops, was developed for distribution to training program participants. In response to invitations sent by the state, about 250 recreation leaders from various community agencies participated in this initial training program. Responses from the participants were positive; at a subsequent evaluation session, participating agency supervisors clearly expressed to the state the need for continuing and expanding the program.

The following summer, the program was expanded to two sections of two-day workshop programs, one section to be held at the state park, the other at a city

park facility. The training manual was updated and again distributed to participants. The state's invitation letter drew 1100 applications from 108 public agencies and community organizations. The program could only accommodate 600 participants, but all 108 agencies were represented. In addition, the City of New York requested and funded under state auspices another day of training for 100 summer workers.

At about the same time, the New York City Department of Parks and Recreation and the New York City Recreational Employees Union Local independently focused on the need for improved training programs. Budgetary constraints had substantially reduced the number of recreation employees, those employees who remained required new skills and management techniques to meet the challenge of delivering services in different ways. Recognition also was given to the need to train the large staff of CETA workers assigned to the city's Department of Parks and Recreation.

The Training Institute

Discussions soon began with the State Parks agency and resulted in a memorandum of understanding amongst the state, city, and union that established the Training Institute of the City of New York. The institute became operational in April, 1979 and is offering, or will offer as programs are developed, recreation and park maintenance training ranging from skills development to college credit courses. Training will be offered to all public employees and private/voluntary agency staff, including volunteers, involved in delivering recreation and park maintenance services.

State, city, and union resources were pooled. State funds of $35,000 were matched with the city's assignment of a staff member to function as the institute's coordinator and the union's provision of classroom space and printing for training manuals and materials. Thus, a unique partnership began its relationship with an endowment of at least $100,000 in cash and in-kind service contributions. The state funds are used to contract for a training consultant for the preparation of training manuals and materials, and for the services of selected trainers skilled in the particular areas of training programs designed and sponsored by the institute.

Training needs were assessed by the institute's coordinator in consultation with the private/voluntary sector and pertinent public agencies. Goals were established, and training programs were designed to meet immediate needs. The following provides a sampling of what the institute offered during its first year.

- *Summer Recreation Staff Training.*

The third year of this training program was expanded to four sections of two-day workshops. Two of these sections were programmed in response to the city's commitment to staff 80 percent of its playgrounds during the upcoming summer season. The enormity of this commitment becomes apparent when considering that very few playgrounds had been staffed over the past decade as a result of fiscal constraints.

To prepare programmatically for the staffing of these playgrounds, two sections of skills and leadership training were given to seasonal playground assistants, CETA workers, recreation directors, and laborers. An additional two sections of the summer training program again were offered to the recreation staff of community organizations. The number of participating organizations increased to 207; and a total of 1,000 participants, including those assigned to staff the playgrounds, were trained.

- *Recreation Management Training—A Workshop.*

This ten-week training program was conducted by the Chairman of the Department of Leisure Studies at New York University. It was offered to supervisory personnel of public agencies and a number of park maintenance supervisors. Response to the course was positive, and the course will be repeated for those who could not be accommodated. Additionally, a sequel will be offered to those who have completed the introductory course.

- *CETA Training.*

This component was designed to train 57 new CETA workers, who were assigned to recreation functions within the City's Department of Parks and Recreation. The seven-module curriculum consists of agency orientation, principles of leadership, principles of program development, programming for special population groups, activity skills development, community involvement, and special topics such as first aid. Much of this curriculum also is applicable to the training of CETA workers assigned to maintenance and operations; plans are underway to adapt the curriculum accordingly.

Operation Explore

As with the Training Institute, Operation Explore also built upon the coordination of existing resources. Operation Explore is an outdoor environmental education program sponsored by the New York State Office of Parks and Recreation, the New York City Board of Education, the National Park Service Gateway National Recreation Area, and the Cooperative Extension of Cornell University. The program is designed to give 4th and 5th grade New York City students the chance

Operation Explore introduces youngsters to land food chains at a restored 19th-century farm.
State Park Commission for N.Y.C.

to learn firsthand about land, forest, and marine food chains. The students take class trips to farms, woodlands, and beaches, then relate those outdoor experiences to their classroom studies.

The aim of Operation Explore is to provide a total experience that can be integrated into the school curriculum. Important to this goal is the preparation of materials for classroom orientation prior to the outdoor trips, follow-up classroom activities and the training of participating teachers prior to the trips.

Initiated in 1977 as a pilot project, Operation Explore offered the program to a limited number of New York City's 32 school districts. Two all-day bus trips were conducted for 125 fourth and fifth grade classes. One trip brought the class to a state park of nature woodlands and to a working farm. The second trip was to the beaches of the Gateway National Recreation Area. Each of the facilities had its staff or guides, trained by the program, conduct an interpretive tour. Prior to the class trips, participating classroom teachers attended orientation workshops and visited the sites. Following the trips, students undertook activities related to their trip experiences.

Sponsor Expertise Fully Utilized

The resources and expertise of the sponsors were fully utilized in the program. The Cooperative Extension of Cornell University developed relevant materials, conducted teacher workshops, trained guides, and provided primary program coordination. The New York City Board of Education made the necessary contacts with school district superintendents, coordinated each district's participating schools, and provided bus transportation for the in-city beach trips. The Gateway National Recreation Area provided beach sites, interpretive park rangers for each of the Gateway trips, and developed educational materials. The New York State Office of Parks and Recreation provided funds for out-of-city bus trips to the farm and state park, developed relevant educational materials, provided park sites and guides, and assisted in the overall coordination of the program.

The pilot project was overwhelmingly successful and led the following year to a city-wide program expansion. All 32 school districts were invited to participate. Five classes each in all but three districts participated in 320 trips, serving approximately 8,000 school children. As

◀ *Community, school, and recreation department can come together to share resources.*
The Nature Conservancy

▲ *Gardening assistance comes into community on wheels via the "Grow Truck."*
State Park Commission for N.Y.C.

Arts and crafts skills training is provided as part of a two-day workshop program sponsored by the Training Institute of New York City.
State Park Commission for N.Y.C.

Dance lessons are made available at a school facility after school hours.
State Park Commission for N.Y.C.

stated in the independent evaluation of the program, "Even though the goal of involving all 32 districts was not achieved, the fact that 29 districts were enthusiastic participants is a mark of great success and indicative of excellent coordinated effort on the part of the project staff."

Operation Explore now is entering its third year under the same sponsorship, but will add an overnight camping component and will address the energy crisis. The camping component attempts to build upon the outdoor environmental experience and to introduce camping as an element of the school curriculum. The overnight trip also will allow participating classes to visit the farm and state park at a more leisurely pace. The energy crisis will be addressed by utilizing train transportation as a more energy-efficient substitute for the chartered buses previously used for the out-of-city trips.

Again, as with the Training Institute, State Parks will catalyze this year's Operation Explore program and provide the funds to set it in motion. The $28,000 in state funds, to be used largely for the camping expenses and the camp naturalist-director's salary, will generate a $95,000 program of additional cash resources and in-kind services from the three other sponsors—Cornell, Gateway, and Board of Education. A major portion, representing about 50 percent of the total costs, will be borne by the Board of Education. This Board of Education commitment is most welcome as it reflects the program's success and, more importantly, a good direction in having Operation Explore become an institutionalized element of the school curriculum. That is the ultimate goal of this project, and one which meets an important criteria of the state's Contractual Services Program—that the funded project effect a policy change.

Other Contractual Services Projects

The state's Contractual Services Program in its three years of operation has been effective in coalescing many resources into various projects which have made inroads into addressing and meeting some of New York City's recreational needs. As examples, the city recreation staff is undergoing retraining and successfully assuming different responsibilities in its redirected role as coordinator of district recreation resource centers. Community volunteers, in coordination with the city's parks personnel and guidance from the private, nonprofit Parks Council agency, have been trained and provided the tools and materials to undertake realistic neighborhood park and playground improvement projects. Hundreds of community-based organizations have been assisted by the mobile Grow Truck and Chuck Wagon in developing community gardens and learning the nutritional value of their produce.

As effective as these programs have been, some are still in their model stages and need to be developed to the point where they are firmly embodied in the park and recreation system. Efforts will be made in the coming year to place the Training Institute on a solid financial basis, to promote the school as a hub of community activity and utilize schools for a variety of services, and to create a larger awareness of the benefits of outdoor environmental experiences as integral components of the school curriculum. The true test of the New York State Parks and Recreation's Contractual Services Program lies in the city-wide policy change each project can effect and sustain.

Clare Beckhardt is General Manager of the New York State Office of Parks and Recreation's New York City Region.

From the Ground Up

by Mayor Jim McConn

Miller Theater in Hermann Park is one of the many new recreational resources provided through public and private cooperation. Houston Parks & Recreation Dept.

When the National Urban Recreation Study for the Houston area was released late in 1977, reactions ranged from "Is it really *that* bad?" to "What are we going to do?" The fifth largest city in the country, the city growing by leaps and bounds, the city with the seemingly dauntless economy, was ranked 140th in per capita parkland.

As one of seventeen urban areas studied by the Department of the Interior's Heritage Conservation and Recreation Service (HCRS) and the National Park Service, the Houston area was found lacking in neighborhood parks, while having outstanding examples of dual purpose land acquistions. Since 1976, under the leadership of Judge Jon Lindsay, Harris County has been acquiring lands along Cypress Creek to serve as parks as well as aid in the flood control effort.

Houston has long been a city where public and private interests have benefitted from cooperative efforts. A number of public facilities, those which contribute greatly to the quality of life in our city, have come about through the generosity of our city's business community and civic leaders.

Jones Hall for the Performing Arts, the Alley Theater, the Museum of Fine Arts, the Texas Medical Center, Rice University, the University of Houston, and our three largest parks all came about because the men and women who built Houston into a major city, and made fortunes doing it, felt an obligation to give something of lasting value to their hometown. That sense of obligation continues today with the expansion of our cultural facilities, parks, and universities led and underwritten by private citizens.

The Challenge Is Answered

When it became general knowledge that the city and county were lacking in parklands, several groups came together to study and address the issue. They soon saw that the rapid expansion of the metropolitan area had outstripped the resources and capabilities of the existing park systems and facilities. Citizen and environmental groups responded with initial cries of alarm and requests for more parks and open space while such resources were still affordable in the spiraling real estate market. Corporate interests realized that increased parks and open space were necessary to maintain and improve the quality of life in Houston. The unusual union of citizen groups and corporate interests with a common goal of increased parks and open space has developed a contemporary urban park ethic.

As these various interest groups discussed the problems brought into focus by the Urban Recreation Study, it became more and more apparent that the same type of public/private efforts which had provided the city with many of its cultural, medical, and educational resources would be the most logical answer to the challenge of quickly upgrading and increasing its recreational resources. These groups were able to work with and through existing and newly created agencies.

Houston Parks Board

The Houston Parks Board was created as a means of soliciting donations of land, funding, and other resources to increase park opportunities in the city and to aid in the securing of grant monies from the Land and Water Conservation Fund. Since the city cannot take title to a piece of property prior to grant approval, the Board acts as a holding agent until such time as grants are prepared, filed, and funded for acquisition and/or development projects. This allows potential donors of property more latitude in transferring title, as well as enabling eleventh-hour donations to take advantage of the tax deductions for such gifts. These donations also allow the city the opportunity to increase the usage of its bond funds and grant monies by using the value of the donated real estate as its fifty percent match for the Land and Water Conservation Fund.

This strategy allows bond funds, which are always in short supply, to be used for other needed projects. By charter, the city must have funds on hand, rather than promised, to cover the entire cost of a construction project. Thus the need for managing monies as efficiently as possible in order to serve our ever-expanding population, continues to increase.

The Parks Board also works to strengthen public awareness of the need for more parks and open space. Through its contacts with the business community, members' service on other civic committees, and speaking engagements, the Board is a very visible parks promoter.

The Board can act as a contractual body for neighborhood improvement projects paid for by private funds, and can accept donations of property. If a donated site is not suitable for a park, the Board can sell the property and use the proceeds to acquire a more suitable site.

A measure of the success of the Houston Parks Board is the donation of some 518 acres (207.2 ha) during October, 1979, which was declared as "Give-a-Park-to-Houston" Month. The sites given range

in size from 1.8 to 500 acres (.72 to 200 ha). The sources of these gifts, valued at some $2.5 million, include real estate and development interests, a banking concern, and the family of one of the city's business leaders.

These donations were in addition to a half interest in a 717-acre (286.8 ha) site by the Brown Foundation, a body which has long been a generous civic supporter. Not only did the Foundation contribute approximately $4.5 million to the acquisition of the site, it also has continued its support by funding the first phase of development.

The Chamber of Commerce and The Park People

Another longstanding co-worker in improving the city is the Houston Chamber of Commerce. One of the goals of the chamber's Civic Affairs Committee is to improve parks and open space. To this end, the chamber and city jointly funded the development of the downtown Tranquility Park. This three-acre (1.2 ha) site provides a green oasis for downtown workers, with a large sculptural water feature commemorating the Apollo moon landing. This cooperative partnership will be continued in an effort to transform Buffalo Bayou in the central city into an aesthetically pleasing people-place, while providing solid economic and social/image benefits for the entire community.

The Park People, organized late in 1978, provides a broad-based, countywide forum for park and open space issues. Serving to coordinate the many groups interested in parks and acting as a research and resource center, The Park People quickly gained the recognition and support of city and county departments. Besides helping to publicize the need for both city and county park bond issues and holding a series of well-attended educational sessions, the group works diligently to foster an atmosphere of interagency and intergovernmental cooperation.

A Partnership for Quality Growth

At the center of this intergovernmental cooperation is a joint study agreement signed by Houston, Harris County, the state, and the HCRS. When the HCRS staff was analyzing the Houston area for the Urban Recreation Study, it found that even though the park and open space situation appeared dismal, there was also a tremendous potential for dealing with the situation.

The resources necessary to rectify the lack of parks—an open, responsive political climate, potential financial commitment by city and county governments, growing public and civic awareness and interest, and private sector support—were all evident. The need for bringing these divergent interests together in a cooperative effort to solve the problem also was evident. The tool for bringing these forces together to address this complex issue was an agreement, termed "A Partnership for Quality Growth," signed February 1, 1979.

Among the initial matters to be tackled was the establishment of "a strong constituency and ethic for recreational, natural, and cultural resources." Thanks in large part to the efforts of The Park People and the increased activities of the Parks Board, this constituency is coming to the fore.

Many neighborhood groups, such as the Neartown Association, the East End Progress Association, the Eastwood Civic Club, and the Heights Association, have become partners with the city departments in increasing neighborhood park opportunities and establishing channels of communication. Each day sees the expansion of this cooperative network.

The partnership agreement also includes a work plan for addressing the many problems to be faced in rapidly expanding Houston's park system to meet the needs of the urban area. Three technical reports which identify resources are in final preparation. An *Inventory Report* will contain a comprehensive listing of recreational opportunities available from public and private sources throughout the county. An *Institutional Analysis Report* will identify the existing linkage between recreation providers, as well as potential institutional links which could impact the delivery of recreation opportunities. This report should present a basis for consolidation or reorganization of programs to achieve a more efficient system. A *Standards Report* will recommend overall system goals to be met to ensure a balanced, responsive world-class recreation system that is achievable and relevant to Houston/Harris County.

The ad-hoc committees which are preparing these documents are composed of park and recreation professionals from city, county, regional, and federal agencies, as well as knowledgeable representatives from the private sector, civic organizations, and environmental groups.

Tranquility Park in downtown Houston was jointly funded by the Houston Chamber of Commerce and the city. Houston Parks & Recreation Dept.

This mixture of diverse talents allows a full range of input and resources.

In order to implement more fully the findings and recommendations of these technical reports, an independent fact-finding body will be formed. This "Green Ribbon Committee," to be appointed by the signatories of the partnership agreement, will be charged with a one-year effort to test the findings of the reports, to determine park and open space needs as perceived by the public, and to develop strategies and recommendations for implementation of a five-year master plan for the Houston area.

Heading In a New Direction

As we proceed toward the appointment of this Green Ribbon Committee, we feel that we are beginning to meet the challenge of providing adequate recreational opportunities for our citizens.

The success of our donation program has led to expressions of interest in more donations throughout the area. Both city and county governments will be pursuing these.

Other resources for supplying recreation space are becoming available. For example, a joint effort between Harris County, the Harris County Flood Control District, and the city will provide a 5.2 mile (8.32 km) long hike-and-bike trail along flood control land abutting Bray's Bayou. The city is in the final stages of leasing some 11,000 acres (4,400 ha) of land from the Corps of Engineers for development of a massive recreational complex on the city's west side to be known as Cullen Park. And Harris County is developing a large recreational facility on another Corps-owned site within the Barker Reservoir.

With our achievements during the past year, our planned activities for this year, and the tremendous potential which has come about through intergovernmental and public/private cooperative efforts, Houston is not only the fastest growing city in the country, but also the fastest growing urban park and open space system.

Jim McConn is Mayor of the City of Houston, Texas.

Why Volunteer?

by Kerry Kenn Allen

Tom Wolfe branded it the "Me Decade." It was ten years of self-improvement, selfishness, and "getting in touch with ourselves."

But it was also a time for reasoned discussion of motives, needs, and rewards. Indeed, the greatest legacy of the 1970s may be Americans' new realization that they can control their individual lives, that self-interest, applied appropriately, can bring growth, change, and satisfaction.

For America's volunteer community—that amalgam of individuals, organizations, and agencies engaged in problem solving through voluntary action—it was a time of expansion and maturation. Even though the 70s were years of increasing self-interest, they also were characterized by unprecedented citizen involvement. Consider these facts:

- In 1974 the Census Bureau reported that some 37 million Americans, one out of every four over the age of 14, regularly volunteered.
- A 1978 Gallup Poll reported that almost 70 percent of adults in urban areas would be willing to get involved in their community if asked.
- The acknowledged range of volunteer activity expanded to include not only the delivery of human and social services but also the administration of voluntary agencies, participation in government, advocacy, self-help, neighborhood organizations, and a wide range of informal helping activities.

By decade's end, it was possible to conclude that there was no problem, no human need, that was not in some way being addressed by volunteers. Even in the Me Decade, involvement with others was attractive and rewarding!

Social Changes Increase Competition for Volunteers

The recognition that volunteers do not act strictly out of altruistic instincts was far too long in coming to volunteer leaders and administrators. The acceptance of volunteers' needs as a legitimate part of the volunteer experience has far-reaching implications for those responsible for stimulating and organizing volunteer activity.

The "Me Decade" of the 1970s brought unprecedented citizen involvement. VOLUNTEER

Much of this recognition was forced on the volunteer world by changes in the broader society. New lifestyles, changing expectations, and alternative reward systems combined to usher in a new era of American culture. The impact on citizens who volunteered was no less than it was on the population as a whole.

From these changes, volunteer leaders were able to draw three clear conclusions:

- With increased social needs, there is increased demand and competition for volunteers. Those who are most successful offer their volunteers opportunity, challenge, and fulfillment.
- Volunteers as a whole no longer are willing to be treated as second-class workers.
- Volunteers whose personal needs are being met will stay longer, work harder, and be more effective.

Diversity of Motives

Why, then, do people volunteer? The reasons may be as numerous and varied as the number of people who volunteer. Each of us, after all, acts and reacts as a result of complex emotions, past experiences, and both conscious and unconscious needs. Just as no two snowflakes, or no two sets of fingerprints are alike, neither are any two volunteers.

As a rule, however, it is both appropriate and accurate to say that people volunteer because it is in their own self-interest to do so. Volunteering fulfills a belief, fills a vacuum, meets a need. It results in a job, new friends, a healthier community in which to live.

Here are some of the most common motivations for volunteering:

Altruism. Even in an age of self-interest, unselfish concern for others still exists. It is the moving force behind most of our social justice and reform movements as citizens seek to help those who are unable to cope with their own problems or who have been denied unjustly the opportunity to participate fully in their community.

Surveys of volunteers which probe motivations invariably bring responses like "I want to help others." Or, "I am solving a serious problem." Or, "They need my help." While cynics will point out that such answers are to be expected, it is also true that a willingness to give unselfishly to others is an essential aspect of virtually all volunteering.

People often volunteer because it "makes them feel good." VOLUNTEER

Expression of Belief. Many people volunteer because they see their involvement as the tangible expression of a religious, ethical, moral, or patriotic belief. It is usually thought of as the motivation of those who volunteer for military service in time of war. But it is also the force behind those who seek alternative service as a tenet of their religious faith, those who undertake lay missionary assignments, those who express their willingness to become involved as a "debt" to the society. Such volunteers seek to find evidence of the strength of their beliefs in their service and may seek recognition that their involvement is motivated by a force outside themselves.

Intangible Personal Rewards. The first answer most volunteers will give when asked why they are involved is either "I like it" or "It makes me feel good." Neither is particularly objective or scientific. Yet both reflect the substantial intangible emotional rewards of volunteering. Leaving one's own needs and worries behind to share another's problems is indeed a fulfilling experience. The biblical injunction that it is better to give than to receive is witnessed daily by millions of volunteers.

Volunteers help out at Special Olympics. VOLUNTEER

Volunteering also produces intellectual, emotional, and physical stimulation. It provides a challenge, relieves boredom. For many, it is a status symbol, particularly when the volunteer position is responsible, visible, and prestigious. It appeals to one's ego, one's sense of being a responsible, giving person.

It feels good.

Tangible Personal Rewards. Volunteering also has become a route to very tangible returns, whether it be new friends or new skills. The recognition of such benefits has been spurred largely by the women's movement. As women have sought to return to the workforce, they have recognized the need for documented work experience, for job-related skills, and for self-confidence to pursue employment. Many realize that volunteer work gives them all of these.

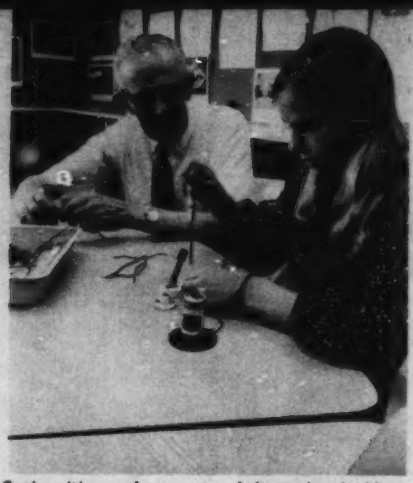
The resulting demands on the volunteer community have resulted in an increased number of formal programs to assess and document the value of the volunteer work experience. Today, a number of major U.S. corporations, the federal government, and many state and local governments accept volunteer experience as background for paid employment.

For many people already working, volunteering offers an opportunity to practice new skills and to explore career alternatives. For others, it is the way to transition into a new community, to confront a new phase in one's life, or to address personal problems. For all, it is a vehicle for improving the quality of life in the community and, ultimately, for oneself and family.

Implications for Volunteer Management

With a recognition of the diversity of motivations has come the application of this knowledge to the everyday work of volunteer management. A clear understanding of motivations has direct implications for volunteer recruitment, job design, retention, and recognition. Let us address some of these.

Job Design. In any volunteer job, there are three sets of needs: those of the agency in which the volunteer will be working, those of the people who will benefit from the volunteer's work, and



Senior citizen volunteers can help teach valuable skills to young people. VOLUNTEER

those of the volunteer. Assuming that each of these can be defined, the best volunteer job will grow out of the overlap of these needs. It will be that set of activities that satisfies some substantial portion of everyone's needs.

This suggests that volunteer jobs are designed most effectively in partnership, rather than paid staff sitting down in isolation and thinking up tasks for the volunteer to perform. Encouraging such participation in job definition also reflects positively on the volunteer as a coworker, not as a servant.

Recruitment. The best single volunteer recruiter is another volunteer who is excited and rewarded by his or her work. Word-of-mouth recruitment helps to personalize the problem being addressed, reassures potential volunteers that their involvement really is needed, helps to relieve insecurity in those who have never volunteered, and gives credibility to the agency.

Although such recruitment is a natural part of any volunteer's life, it is possible to organize your volunteers to do it on a regular basis. Campaigns inviting each volunteer to recruit one other person often result in substantial numbers of new volunteers. Also, they alert your volunteers to the important role they play in helping interpret your agency's programs and needs to the total community.

Retention. It goes without saying that volunteers stay longer and work harder in those places where they are appreciated, where they are able to grow, and where they believe they are providing useful and needed assistance. As demand for volunteers has grown, so too has competition for them. The agencies that have been most successful in securing and retaining effective volunteers are those that have recognized volunteers' new demands.

For example, in an era of workplace democracy, it is not surprising that volunteers are seeking jobs in which they can assume increased responsibilities, in which they will be interacting with helping professionals more or less as peers, not as untutored helpmates. It is important to remember that volunteers' creativity and talent are more important than their time and energy. Settings which maximize volunteer participation, encourage volunteers to try new things, and seek volunteers' input in planning and decisionmaking, are the settings that will be blessed with the volunteers needed to get the job done.

Recognition. Everyone likes to be thanked for his or her effort, whether it be volunteer or paid. Frequent, sincere expressions of gratitude are an important element of any volunteer recognition. So are awards, recognition lunches, certificates, etc.

But there are other forms of recognition that are equally important, that indicate to volunteers that they are accepted as professional people who make a significant, needed contribution. These include involving volunteers in regular staff meetings, providing in-service training for volunteers on a continuing basis, documenting volunteers' work and dependability as part of a permanent personnel file, providing reimbursement for transportation and out-of-pocket expenses. Such things do more than say thank you; they help create the kind of positive, creative, sharing atmosphere in which most people would prefer to work.

Successful volunteer administrators look at volunteers not as a supplement to the workforce, but as people, individuals who are seeking both the opportunity to contribute and a reasonable return on the investment of their time and caring. In response, these administrators provide their volunteers with opportunities that are stimulating and responsible, and offer rewards willingly, not grudgingly. That, simply put, is the key to successful volunteer programs.

Kerry Kenn Allen is the Executive Vice President of Volunteer, The National Center for Citizen Involvement.

Volunteer Partnerships at Jefferson National Expansion Memorial

by Peggy O'Dell

The National Park Service Volunteer in Parks Program has offered Jefferson National Expansion Memorial National Historic Site (MO) an opportunity to expand into the community and tap resources otherwise unavailable to park managers. For the last two years we have been concentrating the efforts of the interpretive managers and the Museum Education Office to develop a quality program which will attract willing people in the community and let the community know of the resources available for its use.

Defining your goals and constraints is the first step involved in establishing a volunteer program. You must consider some basic questions. Do you really need volunteers to add to your existing programs? Will volunteers add the elements you need to improve the quality of your program? Will they be an *integral part* of your program? Remember, volunteers must feel needed or they will quickly lose interest in working.

To answer some of these questions we developed a list of activities which we feel volunteers can do well and which are important to the successful management of the park. They include:

- Giving programs in the Museum of Westward Expansion and the Old Courthouse, two areas dealing with the westward expansion movement of the American frontier.
- Providing roving interpretation in the two museums.
- Providing living history demonstrations of traditional crafts.
- Staffing the information desk and other visitor services functions within the visitor center.

Not all our volunteer work involves public contact. Many individuals have contributed immensely to the success of our program by researching topics, providing library services, co-curating special exhibits, writing educational materials to complement the interpretive program, analyzing visitor use patterns, and so on.

A particularly helpful group is our handicapped advisors. These individuals, who are disabled themselves in one way or another, serve as advisors, assisting Jefferson National Expansion Memorial's staff in defining and meeting the needs of disabled visitors.

Volunteer gives an interpretive talk in the Pioneer Cabin at the Old Courthouse. Joseph Matthews ◀

Word-of-Mouth and Formal Recruitment Successful

Volunteers are able to do almost anything the paid interpretive staff can do but they may not be used to replace paid employees. The first thing we learned about recruiting VIPs was to be open-minded and to publicize the program widely. Word-of-mouth is an especially valuable tool among volunteers. For instance, the grandmother of a former employee works here as a volunteer 20 hours each week. She recruited her sister, who has spread the word among the volunteer organization to which she belongs. That organization has proved to be another steady source of aid.

Recruitment along formal lines is also successful. Articles in the city and suburban newspapers have attracted a substantial number of interested candidates. Others have been contacted through churches, schools, and senior citizen groups. Even the unsuspecting visitor who mentions that he or she enjoys visiting the park, subsequently may be signed up as a volunteer.

Training and Personal Development

The level of expertise a volunteer needs to present a part of your park program does not just happen. We select our volunteers in much the same way as we do our paid staff. We have found that volunteers require and deserve the same kind of training, encouragement, and personal development as paid staff members. Of course, the complexity of task and the individual's own expertise determine the amount of time involved in training.

For example, our volunteer interpreters go through the same rigorous two-week training course as paid technicians do. This familiarizes them with the park mission, the concept of interpretation, the content of the museums, and the thematic content of the interpretive program.

If volunteers are going to represent your park, they must demonstrate the quality necessary to uphold your organization's reputation. That may mean spending the same portion of your time working with new volunteers as with any new employee. In the long run it does pay off. We also have found that the volunteers appreciate involvement with the paid staff; it helps them gain the same degree of "professionalism." We all learn from each other.

After the initial training period, we encourage our volunteers to continue their personal growth. It can be difficult to maintain skills and enthusiasm for a job where you have to remember a century of American history but only work two

The Information Desk at the Gateway Arch is staffed by volunteers. Joseph Matthews

or three days a week. Volunteers need help and encouragement to continue learning and expanding their field of knowledge. Individual counselling, periodic group meetings, in-service training, and a pat on the back all serve important roles in the development of our volunteer staff.

Commitment

We arrange specific work schedules with the volunteers which they must follow. They are expected to report conscientiously for the hours mutually agreed upon. They realize that they have accepted a responsibility and that we rely upon them. They know they are important members of the staff.

Pride in their work and an intense commitment to the park often develop. At the Arch and the Old Courthouse, we recently saw 100 percent turnover in the paid staff of interpreters in one year. In contrast, volunteers who started when the courthouse opened its living history rooms in 1970 are still with us, still meeting their monthly commitment of service. They provide an extremely stable work force.

Recognition

It is important to recognize the contributions of these individuals. At Jefferson National Expansion Memorial, we hold our annual luncheon in the fall. Each volunteer is given a token gift and a certificate of appreciation. This small thanks for the services received is appreciated but often the real reward is intrinsic: knowledge of a service rendered, a job well done, and continued personal growth.

Once the volunteers are comfortable with a job, we find they often want to expand their involvement. Individuals who formerly were intimidated by the thought of standing up in front of a group and talking for thirty minutes now are distressed when groups cancel their tour reservations!

Jefferson National Expansion Memorial now has a staff of thirty-seven volunteers which donates an average of 1,000 hours of service monthly. The volunteers provide direct services for the park visitors, relief for the paid staff, clerical assistance, research and library aid, and dozens of other services. The quality of a visitor's, experience in the park is directly influenced by our VIPs. They are indeed very important people.

Peggy O'Dell is a Supervisory Park Ranger at Jefferson National Expansion Memorial NHS (MO). Ms. O'Dell is Supervisor of the Gateway Arch, which includes the Museum of Westward Expansion and the Visitor Center. A graduate of the University of Missouri, Ms. O'Dell worked as a summer seasonal at Jefferson National Expansion Memorial and as a Park Ranger with the Corps of Engineers. She assumed her present position with the National Park Service in 1977.

Legal and Logistical Aspects of a Volunteer Program

by Betty Murphy

Volunteer assistance traditionally has been a part of the operation of the National Park Service. Numerous service and historical societies, as well as individuals, have assisted and cooperated with parks in implementing various projects. Groups developed projects, signed waivers, and purchased their own insurance to work diligently for us.

Legislative Mandate

To protect and expand these efforts, the Volunteer in Parks Program (VIP) was created by Public Law 91–357 in August, 1970. This law gave the National Park Service the authority to recruit, train, and accept the services of volunteers.

The legislation was broad; its only major restrictions were the prohibition of volunteer maintenance work and the stipulation that volunteer services not replace permanent jobs. Assurances were given to the Congress that the volunteers would supplement the regular NPS workforce and would engage primarily in visitor-related activities such as interpretive demonstrations and visitor service activities. The legislation included insurance coverage of volunteers for protection against tort claims and personal injury while serving in their volunteer capacity; this removed a major concern over the use of volunteers in national parks.

A financial ceiling was written into the original legislation and the later amending legislation. This has not been a totally negative provision, however, since NPS has funded the program to the maximum allowed by the law. At this time that amounts to $250,000 per year.

These funds only can be expended upon the direct costs incurred by the volunteers such as meals, lodging, and local transportation. This restriction insures that no funds can be diverted to management of the program and that persons volunteering will receive at least a minimal compensation for their out-of-pocket expenses. This also prevents, to some extent, persons not volunteering due to economic considerations.

Retired botanist works on developing a herbarium for Organ Pipe Cactus National Monument. NPS

Recruitment, Work Agreement, and Orientation

Volunteers come to the Park Service in various ways. Some are students, others individuals seeking an outlet for their talents, or retired persons looking for a rewarding use of their time. Due to various amounts of publicity over the past ten years, as well as word-of-mouth, the NPS has not had to put forth a concerted effort to recruit volunteers. In many cases we have more applicants than we can accommodate.

We request that interested persons apply directly to the park or parks at which they wish to work. An application is included on the informational brochure we send in response to inquiries about the program.

When VIPs begin their service at a national park they sign an agreement which formalizes their service and gives a description of the functions they will perform. The agreement may be terminated unilaterally by the Service. Persons under 18 years of age also must submit a parental permission form. Groups may sign up as a group rather than as numerous individuals.

Training of VIPs consists, in most cases, of an orientation to the National Park Service and the area in which the volunteer will work. It is held at the area in which the volunteer is working. Since VIPs should come to us with some expertise, we do not provide training to develop basic skills. Sometimes, parks in close proximity to one another will develop joint orientation or training programs.

At the end of their service as volunteers or at an annual awards ceremony, Certificates of Appreciation, signed by the NPS Director, are given to our VIPs.

Services and Restrictions of VIPs

The functions performed by VIPs vary from working with regular and seasonal staff on walks and talks, to greeting visitors and answering informational questions. Volunteers may give living history demonstrations, do historical work, develop or organize museum collections and/or exhibits, conduct natural history research projects, assist with resource management projects, or present environmental education programs. They engage in such varied activities as photography, arts and crafts, demonstrations, and library work.

There are some necessary restrictions on the activities of VIPs. In consideration of employee unions and to maintain the volunteer program as a supplement to the activities of the NPS, volunteers may not engage in functions which normally should be assigned to regular or seasonal personnel. They cannot serve in a law enforcement capacity, nor can they perform any function which could be considered hazardous duty. VIPs do not work a full-time schedule. Volunteers do not wear the NPS uniform. This is due primarily to the significant expense involved. The Service also feels it is important that its volunteers are recognized as volunteers, separate from the regular staff.

Housing, if available, may be provided to NPS volunteers. This is a rare situation, however, and often "housing" consists of a campsite made available to the VIP. In any case, if government quarters are provided, rent must be paid.

Program Coordination and Management

Each park having a VIP program must have a designated VIP coordinator to maintain records on the program and to serve as the manager of the overall park program. Having an identified person, aside from their supervisor, to whom volunteers can go with questions and/or problems, is essential to the smooth operation of such a program. It is also important that volunteers on duty know who to call upon and what to do in case of an emergency.

VIP greets visitors to Gateway National Recreation Area's Sandy Hook Unit. ▲

Elaine Bartlett

Young volunteer helps with kitchen garden chores at Turkey Run Farm's living history program. ▼

D. J. Boushari

The question of spouses or relatives of employees working as volunteers is a sensitive one which must be dealt with carefully. It is a situation which may occur since VIPs are not federal employees. However, conflict of interest may be a serious problem if the spouse receives or appears to receive any substantial financial benefit such as food, lodging, or training in salable skills from participating as a VIP. Each case of this sort is reviewed by the appropriate ethics counselor prior to the approval of a spouse as a VIP.

Many persons decide to volunteer for the NPS in the hope that this experience will lead to a permanent position. We try to discourage the VIP route into the Service, since it is not a sure one and the Office of Personnel Management regulations must be followed in all hiring. We feel it is important that all prospective volunteers are made aware of this prior to becoming VIPs.

Problems with volunteers have been minor and minimal. Making duties clear cut, providing adequate orientation, and fostering communication between park staff and VIPs, as well as showing consideration for their assistance, are the basic factors in developing a successful volunteer program.

The National Park Service has found the VIP program to have been a positive experience. Our personnel have come to know many talented and generous people from all walks of life and ranges of experience. During the past year, more than 4,600 volunteers in 200 areas of the National Park System have contributed over 400,000 hours to our programs. Volunteers have provided bridges to local communities. We have been able to develop an evolving program which benefits both the National Park Service and the people who have donated their time and talents to us.

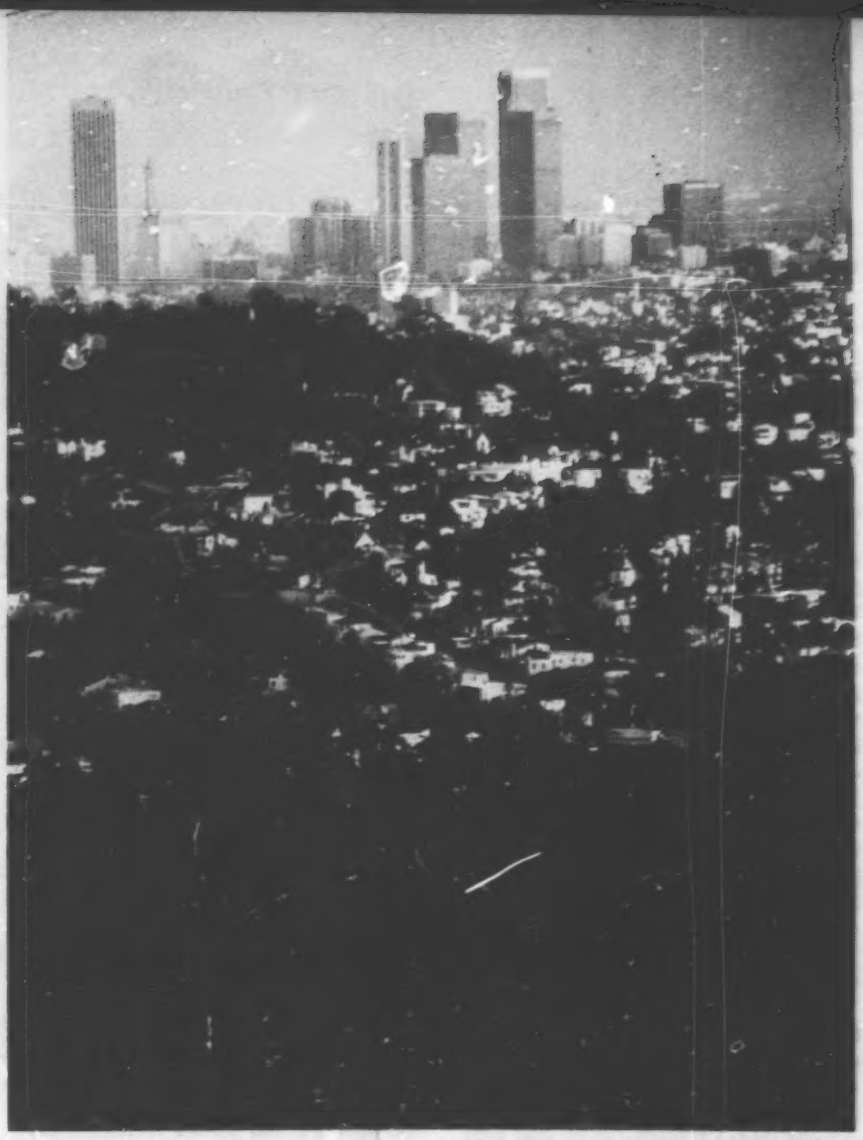
Betty Murphy is VIP Coordinator in the National Park Services's Division of Interpretation and Visitor Services.

Santa Monica Mountains National Recreation Area

by Robert S. Chandler

The National Parks and Recreation Act of 1978 created the Santa Monica Mountains National Recreation Area which became the newest and potentially largest urban park within the National Park System. The establishment of the NRA culminated some 20 years of citizen efforts by the Friends of the Santa Monica Mountains, the Sierra Club, and other concerned conservation organizations to find some method to preserve a significant portion of the Santa Monica Mountains for use by the millions of people in the Los Angeles metropolitan area.

The act identifies the NRA as an area encompassing 150,000 acres (60,000 ha) within a much larger 240,000-acre (96,000 ha) Santa Monica Mountains zone overlaying the NRA. The zone fits the new concept of an "Area of National Concern" which requires maximum participation of state and local governments in planning and exercising appropriate land use controls. In a sense, the NRA is a hybrid, since it contains many elements of a traditional unit of the National Park System, mixed with areas where state and local governments have the principal responsibility. This obviously sets up an ideal condition to try new and innovative approaches. Thus, Santa Monica Mountains National Recreation Area is a laboratory for new methods of cooperative planning, land acquisition, and management.



With the advent of the NRA, focus on the recreational use of the mountains by nearby city residents is being emphasized. Paul Chelsey, Smithsonian

Legislative Requirements

Under the act, the National Park Service has been given the initial responsibility for planning and managing land in the Santa Monica Mountains. The following key provisions established the initial framework for a partnership approach:

1. Establishment of a 150,000-acre, (60,000 ha) NRA boundary within a 240,000-acre (96,000 ha) overall planning zone to involve state and local parks, private recreation areas, property owners, and numerous communities located within the mountains.
2. Requirement for the National Park Service to submit to Congress by January 1980 a comprehensive land acquisition plan to guide the Park Service's five-year acquisition program.
3. Authorization of $125 million over a five-year period for direct federal acquisition of land in the Santa Monica Mountains. Authorization of an additional $30 million for a new grants program to the state, and through the state to local governments, for land acquisition and development of recreation facilities within the 240,000-acre (96,000 ha) Santa Monica Mountains zone.
4. Requirement for the National Park Service to submit to the Congress within two years a general management plan containing the conceptual and long-range strategy for resources management, visitor use, and recreational development.
5. Establishment of an advisory commission to function as a vehicle for citizen involvement in planning and managing the NRA. The commission was directed to submit a report to Congress by January 1981 which assess capability of state and local jurisdictions to manage the recreation area and makes recommendations regarding changes in ultimate ownership or management.

In addition, the National Park Service is required to comment on any direct or indirect federally-funded or licensed undertaking within the overall zone. With the legislation establishing tight planning deadlines and setting a new tone for cooperative management approaches, the National Park Service staff in January 1979 began the immense task of putting this new NRA together and making it work.

Understanding the Challenge

The Santa Monica Mountains are as complex physiographically as they are politically. Bordered by Los Angeles' Griffith Park on the east and Point Mugu State Park on the west, the area is approximately 47 miles (75.2 km) long, averaging 7 miles (11.2 km) wide.

The Santa Monica Mountains are one of two east-west coastal ranges in California and are unique in southern California as the only unspoiled coastal range in the midst of a major metropolitan area. The mountains offer visual contrast to the highly urbanized setting of Los Angeles. Most of the topography in the Santa Monicas is rugged and steep. Striking contrasts between rugged ridgetops and valley floors, riparian stream corridors and chaparral-covered slopes, sandy beaches and rolling hills define the unique scenic quality of the region. The 44 miles (70.4 km) of coastline is a mixture of private homes with approximately 22 miles (35.2 km) in public ownership. Several state and county beaches provide excellent year-round use for millions of nearby urban dwellers.

Large sections of the mountains have been carved away in recent years to make way for subdivisions, and hundreds of single-family homes are springing up throughout the area. The rising development pressure results in an area with perhaps the most active and volatile real estate market in the country.

Politically, the NRA lies within three major jurisdictions: the City of Los Angeles, Los Angeles County, and Ventura County. Los Angeles is the nation's third largest city with a regional population of 10½ million people; there are sixteen congressional districts, 82 incorporated cities, and some 7½ million vehicles on 600 miles (960 km) of freeway in the County of Los Angeles, which has a county budget of over $3½ billion. The urban sprawl covers well over 400 square miles (1,040 km) and is seriously deficient in park and open space areas.

The challenge to the National Park Service is not only to recognize potential cooperative relationships within this complex region but to build effective partnerships among state and local governments, other land managing agencies, private enterprise, and the thousands of property owners in the Santa Monica Mountains to somehow jointly put together a new kind of recreation area.

The initial focus of the staff was to get the program underway in three main areas: land acquisition, planning, and visitor services programs. This involved a concentrated program of getting to know the area as quickly as possible, assembling available data, and getting to know the people who were actively involved in the area. The extremely short deadlines for developing both the land acquisition and general management plans made it obvious that we would have to rely heavily on existing data. There was no new area study to use as a starting point. We were starting from scratch. There were earlier studies of the Santa Monicas, but none of these recommended a direct federal role.

Weekends and evenings were used to explore the area, learn the canyons and ridges, and get a feel for the resources. It was also a time to get to know the people who were knowledgeable about the area. This is an important element in understanding a new area and is essential in building trust and establishing credibility.

From the outset we found a high degree of willingness by other park and recreation agencies and private recreation operators to work with us in planning the NRA and developing programs. Immediately, we established the fact that we did not intend to take over existing park operations in the Santa Monicas but to supplement and develop more fully the recreational potential of the area.

Land Acquisition

Certain strategies were involved in the land acquisition program. Within the boundary, specific lands, which met the purpose and objectives of the legislation were identified. We considered a full range of alternative land protection methods. We weighed the need for the land against the costs and impacts on private landowners and state and local governments. We began to coordinate closely with local governments so that the potential for reliance on their existing land use controls was cultivated. And we considered minor boundary changes that could save costs and facilitate management.

Consequently, the land acquisition plan employs a range of techniques. Acquisition approaches of fee, less-than-fee, scenic and agricultural easements, trail corridors, cooperative planning zones, and compatible private recreation uses are all being employed to develop an effective balance of uses within the mountains. The result will be a mosaic ranging from public land to private land and cooperative planning zones, with communities such as Malibu and Topanga existing as neighbors within the park.

Implementing a land acquisition strategy becomes increasingly difficult with the staggering land values, an appreciation rate averaging 24 per cent each year, and increased development pressure on prime recreation lands. With limited dollars in relation to total land values, the task has been to identify areas that will

Malibu Creek State Park will continue to exist as an entity within the NRA. Geologists have found rocks here that date back 20 million years. Paul Chelsey, Smithsonian

provide the best return for preservation of significant natural areas, open space, and potential recreation sites.

In areas where no federal interest will be acquired, NPS will work with property owners and regulatory agencies to encourage land uses that maintain the open rural character of the mountains. The objective is not to halt all development but to encourage levels and kinds of development that do not seriously impact the scenic qualities of the area. An example would be to recommend design considerations and landscaping suggestions which both complement scenic quality and are suitable in a fire-prone area.

Even in areas identified for fee acquisition, NPS will be evaluating each parcel to determine whether the NRA objectives can be reached by purchasing in less-than-fee or perhaps by acquiring only part of the property in fee. Also, in the fee acquisition zone, NPS generally will not buy homes except in a situation where the site is needed for a specific recreation use.

The acquisition program currently is being coordinated among the National Park Service, the California Department of Parks and Recreation, and the Santa Monica Mountains Conservancy (the state agency established to implement the federal grant program within the Santa Monica Mountains zone). This coordinated approach to land acquisition promises the best return for shrinking federal and state land acquisition dollars.

Common Goals: The General Management Plan

In the spirit of the legislative recognition that the state and local governments involved in the Santa Monicas have substantial authority to protect and provide for wise use of the mountains, the emerging planning and management philosophy of the National Park Service is one of defining, agreeing upon, and implementing common goals. For instance, the plans for the state parks within the boundary, already complete, approved, and responsive to public expression, constitute a part of the "common goals" approach. As such, their implementation by the state will continue. Likewise, in some areas, county plans and zoning ordinances provide ample protection of the character of the landscape, effectively achieving the common goals of the county, the residents, and NPS, and alleviating the necessity for federal purchase.

The general management plan will seek to reflect common goals of the national, state, and local governments; the residents of the mountains; and other affected and interested parties in describing a blueprint for this new urban recreation area in a natural setting. It will address such topics as management of the natural and scenic resources, recognition of the special values of the Native Americans who once used the mountains so heavily, recreation use of natural settings by the full variety of urban and suburban as well as national visitors, protection of threatened species and airshed values, and transportation.

For the plan to be effective, the development of strong working relationships with the NRA's Advisory Commission and a 65-agency technical assistance committee is crucial. Continuing dialogue with these two groups as well as with homeowners' associations, urban community organizations, conservation groups, mountain residents, and others will be the communication link that will spell success or failure for the plan and its future implementation. In addition, a more traditional public involvement program, which began with ten enlightening and productive planning workshops will be interwoven throughout the process.

By planning for common needs and building good relationships with all the people that the recreation area ultimately will serve, NPS hopes to develop a broad-based commitment to the future of the unique Santa Monica Mountains and an effective stewardship of the land for the people of the Los Angeles area and the entire nation.

NPS Interpretive Specialist supplements environmental education programs at Will Rogers State Historic Park.
Tim Thomas, NPS

Visitor Services: Partnerships Serving People

The visitor services staff of the NRA has been working to bring a number of visitor use planning concepts into reality. In developing a variety of recreation, education, and interpretive programs, the approach has been to share public and private agency resources to better serve the public. This approach has resulted in cooperative efforts between the California State Park and National Park Service rangers in providing environmental education and natural history programs.

A guiding concept behind this effort was that programs and services could begin prior to the establishment of a federal land base within the NRA. An analysis of lands within the proposed boundary identified over 30,000 acres (12,000 ha) of existing public land which included a number of state and county parks available for recreational use. In addition, it found that over 30 private recreation summer camps operated within the Santa Monica Mountains, serving over 100,000 children annually. A variety of volunteer Sierra Club hikes and Resource Conservation District school programs also utilized the area. Obviously, a great deal of recreation activity already occurred within the mountains. Out of this analysis three important philosophies emerged:

1. The NRA could serve as a facilitator in bringing a variety of organizations together in the mountains to jointly serve the public.

2. National Park Service programs would be developed to augment and expand existing activities rather than duplicate state and local recreation efforts.

3. Joint staffing of programs between federal, state, and private recreation organizations would be an effective method of sharing resources and maximizing existing program dollars.

Jointly sponsored programs currently are underway in environmental education, teacher training workshops, recreation summer camps through the American Camping Association, interpretive programs for the handicapped, and special recreation events. An intensive effort in community outreach will begin this spring with a cooperative transportation program. This program will make it easier for members of community organizations within transit-dependent areas of Los Angeles to spend a day in the Santa Monica Mountains. Designed to serve more than 15,000 people, the program will provide positive experiences that, hopefully, lead to return visits by participating groups. The jointly funded program is a cooperative effort among five agencies.

Working Together for the Future

The new approaches and partnerships at Santa Monica Mountains in land acquisition, planning, and management will establish new directions for future parks. The challenge of getting citizen groups, agencies, and organizations to pull together for a common goal is real. Cooperative efforts are a must if we are to survive in a world of spiraling costs and limited dollars for establishing and managing new parks, particularly in complex urban settings. We must look for opportunities to work together rather than excuses to proceed independently. The concept of combining resources to jointly serve the public is here to stay.

Developing active partnerships is one way of making it work for now and for the future.

Robert S. Chandler is Superintendent of the new Santa Monica Mountains National Recreation Area in California.

The Pinelands National Reserve

by Sean Reilly and Chick Fagan

Picture yourself canoeing down a dark meandering stream with tall Atlantic white cedars bordering every turn in a quiet, seemingly endless float toward a coastal bay. Occasionally portions of the stream bank open up to wild cranberries and a variety of rare orchids. The woods contain a large number of rare and endangered plants and animals. Timber rattlesnakes bury themselves in the moist sand along the streams to hibernate through winter. Tree frogs and other amphibians inhabit the backwaters of the bogs and the thick mosses. Beavers and otters build bankside dens and bald eagles winter near the mouths of the rivers that enter the bays.

Unless you knew where you were, it would be difficult for someone to convince you that you were in one of the most urbanized states of the nation — New Jersey. Yet New Jersey contains some 1.1 million acres (440,000 ha) of these unique pine barrens, ribboned by winding river corridors and dotted with small towns and farm communities.

Not a wilderness in the pure sense of the word, the pine barrens have been exploited over the past three centuries by significant bog iron, glass, and paper making industries. But none has endured. With its demise, each industry has left entire towns in the pinelands to succumb to obsolescence and the ravages of fire, vandals, and time. An occasional stone wall, sand road, or ornamental tree is all that remains of some once-prosperous industrial communities.

Another reason that civilization has bypassed much of the pine barrens is that the loose, sandy soils that are predominant in this region do not lend themselves to traditional forms of agriculture. For centuries, this has helped to discourage enduring human settlement. In contrast, the wet lowland areas of the pinelands support very productive blueberry and cranberry cultivation which is firmly established as part of the "piney culture" indigenous to the region.

Early Protection Efforts

In recent years, large-scale development often has been proposed for these vast, flat, easily overturned lands of pine. Public outcry managed to thwart these proposals, but various governmental entities and local groups have recognized the need to assure some permanent protection to the area's unique natural and cultural resources. Some local governments have tried to establish protections of sorts; but it has been difficult for them to address economic factors that transcend political boundaries.

In the mid-1960s, a study conducted by the National Park Service and the Philadelphia Academy of Natural Sciences recommended preserving an undeveloped portion of the pinelands. While the study did not survive the report stage, one of its proposals was implemented many years later. In 1972, the New Jersey state legislature created a regional agency, the Pinelands Environmental Council, and charged it with establishing some control over development in the region.

This Pinelands Environmental Council was clearly dominated by local interests, some of them more interested in compatible development than in environmental protection. Political differences between the council members and Governor Brendan Byrne intensified. When the council submitted a draft of its plan, the document was criticized by state officials. At this time, the New Jersey Commissioner of the Department of Environmental Protection (DEP), David Bardine, appealed to Nat Reed, then Assistant Secretary of the Interior, for help in protecting the pineland resources.

In response, a 1975 Department of the Interior study recommended protection of more than a million acres (400,000 ha) of New Jersey pinelands. That study, plus the continuous pressure of local interest groups, proved to be the springboard for new and successful efforts to protect the area.

In 1976, Governor Byrne convened a conference in Princeton to seek public input on measures that would protect pineland resources once and for all. From this conference came an Executive Order by the Governor establishing a committee charged with recommending an effective protection strategy. While in its final stages, that study added fuel to the debate brewing over pending federal legislation to designate the pinelands as the first National Reserve in the nation. In November of 1978 that legislation was passed; Section 502 of the National Parks and Recreation Act finally named the New Jersey pinelands as a National Reserve.

A New Concept in Landscape Preservation

The Pinelands National Reserve concept provides for a new form of partnership which combines the capabilities and resources of the local, state, and federal governments and the private sector and provides an alternative to large-scale direct federal acquisition, which would be inappropriate in the pinelands.

In creating the Pinelands National Reserve, Congress recognized that the pinelands region embodies an extraordinary combination of ecological, scenic, cultural, recreational, and educational values and that these values are being threatened with irretrievable loss due to poorly planned and inappropriate land uses. The growth of retirement communities, the advent of casino gambling in nearby Atlantic City, and the relentless gnawing away of the pineland fringe areas by suburban expansion and uncontrolled mining of sand and gravel have combined to guarantee the demise of the pinelands.

The creation of the National Reserve was the culmination of a growing awareness at both the state and federal level that foresighted action was needed on a scale which could not succeed without full intergovernmental cooperation. That spirit of cooperation is fundamental to the National Reserve concept.

The Commission

Federal legislation mandated the creation of some state planning entity. Accordingly, New Jersey's Governor Byrne established the Pinelands Planning Commission by Executive Order #71 in February, 1979. The commission is the vehicle or forum for the National Reserve partnership. Its 15 members represent all the groups and public entities that have any interest in the area. Seven members are appointed by the Governor; seven others by the counties effected by the legislation. The final member represents the Secretary of the Interior. Mr. Don Kennard, a private consultant and former state senator and representative with a wealth of environmental experience, presently holds this position.

The commission is responsible for preparing a comprehensive management plan which, when implemented, will adequately protect the pinelands' special values and provide for appropriate recreational opportunities and economic activities. The comprehensive management plan must provide for a wide array of traditional and innovative land management techniques which will complement and protect the investment of approximately $60 million in state and federal land acquisition funds for the pinelands.

At the same time it established the Pinelands Planning Commission, Executive Order #71 also gave the commission the authority to review any development or construction projects applying for state permits. This development review process was set up to discourage incompatible development of the pinelands during the planning process.

The commission's diverse makeup has proved to be both an asset and a liability. On the plus side, no faction can claim it is not represented. However, obtaining a consensus on any matter from such varied interests can be very difficult and time consuming. Delay in the appointment of the commission's Executive Director further handicapped early planning efforts.

Pinelands Protection Act

In June of 1979, however, the Governor appointed Terrence Moore as the commission's Executive Director and signed the state legislature's Pinelands Protec-

tion Act into law. Under the Pinelands Protection Act, the renamed "Pinelands Commission" was strengthened and given broader authority. The act set up the Pinelands Commission within the state Department of Environmental Protection. Yet the commission functions as an independent agency; its members report only to the Governor.

Additionally, the act extended the commission's powers of development review to cover all local building projects. Interim development standards were established; they are relatively simple but tough. Not everyone favors the interim standards but they will remain in effect until superseded by the standards of the final comprehensive management plan.

Time Pressures

The Pinelands Protection Act calls for adoption of the comprehensive management plan by August 1980. Prior to this, the plan must be submitted to a Council of Mayors for further recommendations. So the commission is racing against time to meet its deadline.

To accommodate the commission's double mandate of planning and development review, Terrence Moore has hired two separate staffs. Only the planning staff receives federal funds. With his planning staff, Moore has worked out a method by which he hopes to meet the state deadline with at least a rough draft of the plan. They have enlisted the service of a small core of consultants. The consultants are making an initial resource inventory and analysis. After their reports are submitted, the commission will review and synthesize their material into a workable comprehensive management plan for the pinelands.

As of early Spring, when this article was prepared, the reports were coming in and staff review was well underway. Many of the reports were being presented to the public for further input.

After synthesizing the reports, many of which contain different objectives, the commission wants to adopt certain broad policies and follow through on them quickly, with a program to implement each policy. These policies and programs will comprise the final comprehensive management plan. After additional input from the Council of Mayors, the plan will be adopted.

Comprehensive Managment Plan

This comprehensive management plan will cover every significant land use issue. These will include criteria for acquiring lands, land acquisition methods and types of payments, management of acquired lands, protection of ground and surface waters and of agriculture, recommendations for intensity of recreational use, management of scientifically unique natural areas, zoning, transfer of development rights, tax impacts, and a host of scientific and technical considerations necessary to back up strict land use controls.

After adoption by the state, and within 18 months of receipt of funds through Section 502 of the National Parks and Recreation Act, the Pinelands National Reserve Plan must be submitted to the Secretary of the Interior. As indicated earlier, the objective of the plan is not to create another national park, but to assure the protection, preservation, and enhancement of the area's unique natural and cultural resources through an effective federal, state, local, and private sector partnership.

Need for Government Consistency

Obviously growth factors can't be ignored when dealing with the pinelands. Many people are watching to see the degree to which the final plan can accommodate controlled development without compromising the resource protection goals for the area. Governmental consistency on this subject is crucial. Federal agencies must realize that a federal mandate exists to protect the unique resources of the pinelands and to refrain from activities that might compromise them.

To help accomplish governmental consistency, the Federal Advisory Committee has been formed. It includes those federal agencies that impact on or will be impacted by the comprehensive management plan. This committee, working in cooperation with the Region 2 Federal Regional Council, serves as the primary coordinating mechanism between the federal government and the Pinelands Commission. In addition, the Heritage Conservation and Recreation Service provides technical assistance to the commission, helps its members to better understand the federal perspective, and channels federal funds to the state.

New Jersey state legislation also helps promote government consistency. Present state law requires that local plans and ordinances conform with the final comprehensive management plan and the Pinelands Commission has been given the authority to enforce this conformity.

Political Differences

Final resolution of political conflicts arising from this enforcement authority and other aspects of the planning process will be crucial. The question most often asked by local and county governments is how will the comprehensive management plan affect their historically independent right to zone and manage their own land use.

By soliciting policy recommendations from the public and the Council of Mayors, the commission hopes to make local governments feel part of the areawide planning effort. Ideally, the local jurisdictions will bring their ordinances into compliance with the final plan voluntarily; the commission does not want to act like a superpower. But this is a definite problem area that many people will be watching.

It is interesting to note that for the past two decades every municipal official has indicated a desire to preserve the natural resources of the pinelands. The problem was that they never found the mechanism to do so. Now they have the undeniable opportunity to protect those resources. Will they have the political wherewithall to see it through?

The jury is still out. Hopefully, all parties involved will find a way to cement this partnership in landscape preservation and their ambitious planning efforts can serve as a model for the entire nation.

Sean Reilly is Pinelands Coordinator for the New Jersey Department of Environmental Protection. Chick Fagan is an Outdoor Recreation Planner in the Northeast Regional Office of the Heritage Conservation and Recreation Service.

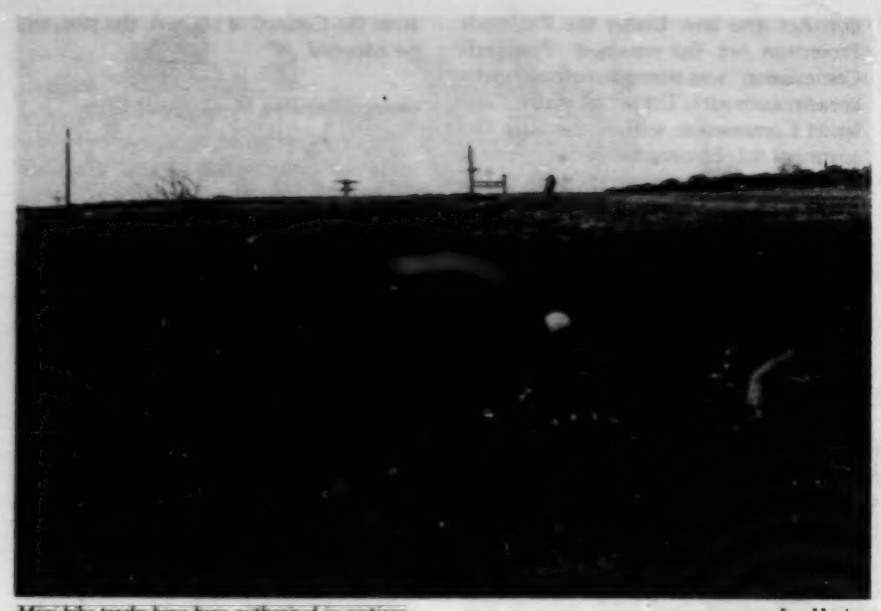
Photos courtesy of Chick Fagan

PEPCO: In Partnership with the Community

by James H. Parsons, Stephen M. Genua, and D. Scott Gravatt

Garden plots, regulated by Watkins Regional Park, dot portions of the right-of-way.

Les Henig



Mini-bike tracks have been authorized in sections.

Les Henig

The Potomac Electric Power Company (PEPCO) is headquartered in the Nation's Capital, and serves the electrical energy needs of Washington, DC and the surrounding metropolitan area. The service area is supplied through a network of transmission lines on 300 miles (480 km) of rights-of-way which cover over 8,000 acres (3,200 ha). This land area is necessary for the reliable transmission of high voltage electricity, but at the same time, it often is possible to use this land for additional purposes, as long as they do not interfere with the power company's needs. Because of its program of fostering such compatible uses, the Potomac Electric Power Company is indeed a good neighbor.

The PEPCO program and the process it employs to implement compatible use of company land by the community it serves could be replicated or adapted to the needs of many other areas. Local park and recreation agencies certainly should attempt to gain maximum benefit from similar partnerships with utility companies.

In PEPCO's case the process begins with the purchase of the land. PEPCO's overhead transmission line rights-of-way are purchased in "fee simple" with the exception of state and federal property, where easements are obtained. Most of the rights-of-way through PEPCO's suburban service areas were purchased years ago, before the boom in development and the accompanying increase in the cost of land throughout the Washington area. As a result, the right-of-way properties are extremely important assets to PEPCO. The sheer density of suburban development would make these rights-of-way impossible to duplicate.

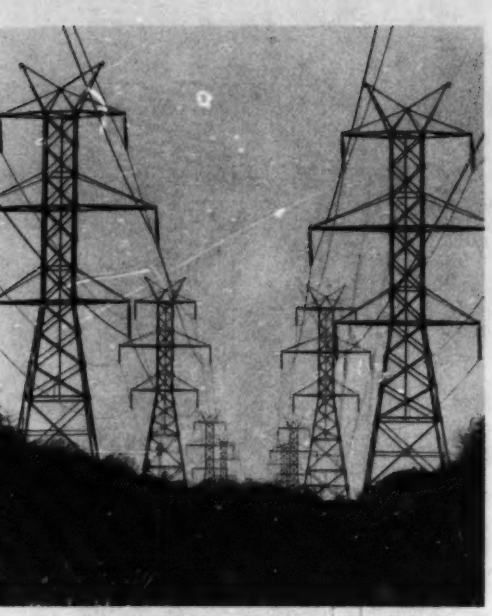
Clearing And Vegetative Maintenance Practices

Once the land is purchased, the necessary right-of-way preparation and construction begins. Right-of-way preparation has evolved from the old clear cut method to a selective clearing method which leaves shrubs, herbaceous vegetation, and low growing tree species such as dogwoods, cedars, and holly. In addition to this low vegetation, a fringe of taller trees is left along the edge of the right-of-way. These trees are saved based on their height, with the heights increasing as you approach the edge of the right-of-way. This selective clearing method and "tapered edge" offers a more pleasing appearance than the clear cutting. However, both methods make it possible to use the land in many ways. After the clearing work is completed, the actual transmission line is erected. It consists of lattice towers or steel poles supporting the electric lines.

Once the line is constructed, the power company must maintain a relatively low vegetative ground cover that will not grow up and interfere with the wires. This maintenance program is administered by PEPCO's Forestry Section. The vegetation maintenance takes one of two forms. The first is grass mowing. Where a right-of-way passes through an urban, suburban, or commercial area, PEPCO rights-of-way are planted in grass, which is mowed during the summer months. The second form of vegetation maintenance is referred to as brush control. Areas which are not used by the public are allowed to grow low shrubs, plants, and trees. Taller trees are selectively removed approximately every four years.

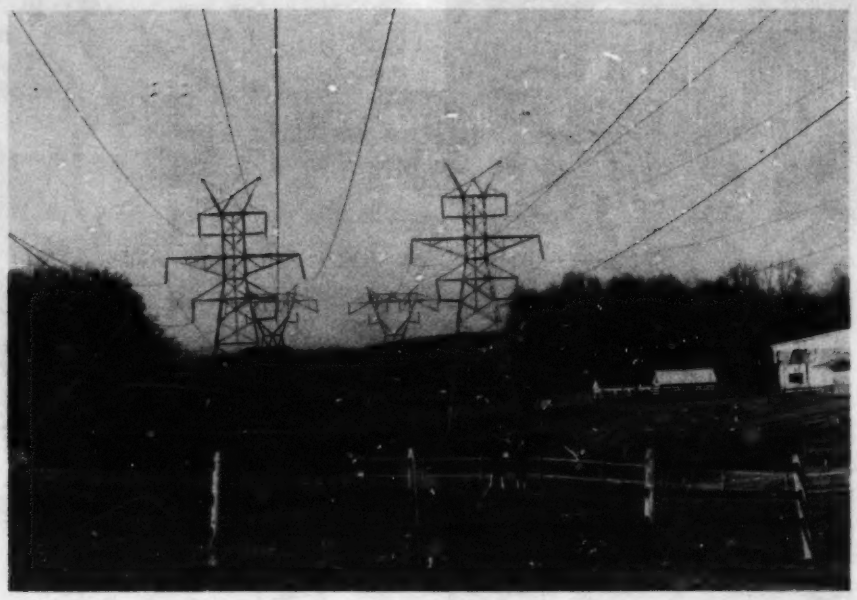
Compatible Uses of Rights-of-Way

This background knowledge of the land provides a framework for understanding what the power company means by a compatible use. The use must be com-



Selective clearing method leaves a low level of desirable vegetation along right-of-way.

Les Henig



A Potomac horse center uses part of a transmission line right-of-way.

Les Henig

patible with the method of vegetation maintenance employed, the maintenance of the physical facilities, and of course, the transmission of electricity.

PEPCO allows many compatible uses. Presently, civic, governmental, private organizations, and other utilities use PEPCO property, at no cost. These different groups represent a wide range of activities, from family gardens to the preservation of rare wildflowers and birds, to research studies on the environmental effects of transmission lines.

One of the rights-of-way passes through the U.S. Department of the Interior's Patuxent Wildlife Research Center where scientists study and monitor the wildlife and vegetation. On another right-of-way, the Chesapeake Bay Center for Environmental Studies is researching the configuration of forest patches needed to maintain bird and plant communities. These are just two of the several educational and research studies being performed on PEPCO's rights-of-way.

As mentioned earlier, PEPCO installed most of its lines prior to the extraordinary spread of suburban developments. So the majority of the wires originally passed over farmers' fields and through rural woodlands. At that time, compatible use generally was limited to farming and use by other utilities such as the telephone, water and sewer, and gas companies. As the population in the metropolitan area grew, the farmlands became suburban residential communities. Where formerly there were only one or two families in an area, there now are hundreds whose backyards adjoin the rights-of-way.

One can imagine the diversity of uses that have resulted from this situation. There are numerous gardens, children's play areas, hiking, biking and horse trails, public street crossings, a minibike track. One development even has part of its golf course on a right-of-way. In areas that have escaped development, grazing livestock and croplands under the wires remain a common sight. Quite literally, the Potomac Electric Power Company is in partnership with the community.

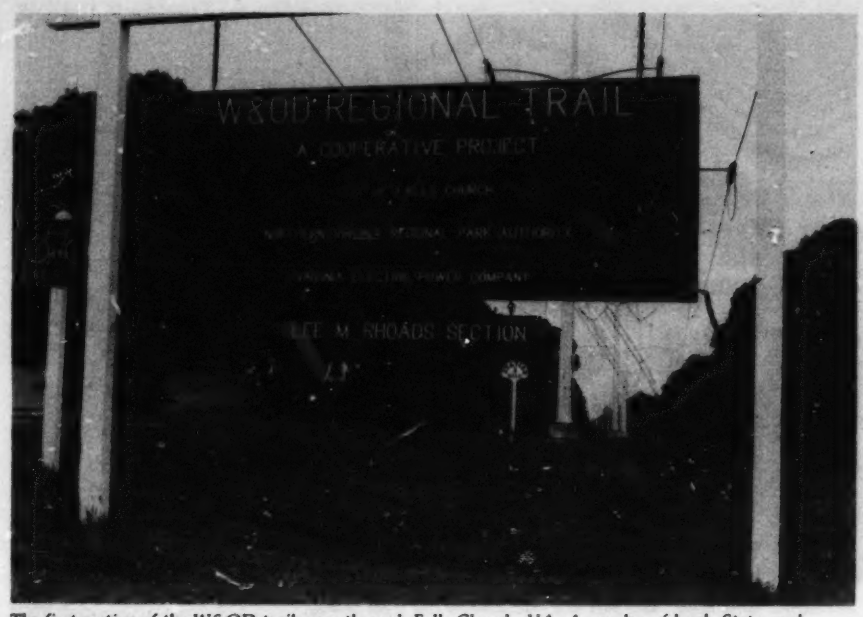
The power company is pleased to consider a request from any responsible individual, business, civic organization, or government agency for a compatible use of right-of-way property. PEPCO receives many letters each year requesting permission to use its property. Each request is given careful consideration to determine whether or not it will interfere with the company's operations. If it is decided that the requested use is compatible, permission is granted by means of a letter of agreement which is sent to the requesting party for its approval. All requests are handled by the Manager of PEPCO's Real Estate Department, located at 1900 Pennsylvania Avenue, NW, Washington, DC 20068.

The Potomac Electric Power Company has been extremely successful in the joint and multiple use of its rights-of-way for recreation, agriculture, preservation, and research. It envisions even greater use of these properties in the future for such activities. Indeed this is supported by an increasing number of inquiries from the urban and suburban communities within PEPCO's service area.

James H. Parsons, Stephen M. Genua, and D. Scott Gravatt are Foresters within the Forestry Section of the Potomac Electric Power Company (PEPCO).

The W&OD Railroad Regional Park

by Darrell G. Winslow



The first section of the W&OD trail runs through Falls Church, VA. A number of local, State, and Federal partnerships made this regional park possible. Northern Virginia Regional Park Authority

The Northern Virginia Regional Park Authority (NVRPA), which is supported by three cities and three counties, is an excellent example of a partnership that works for the acquisition, development, and operation of regional facilities to serve the densely populated area of northern Virginia.

NVRPA which celebrated its 20th anniversary in 1979, has developed facilities that are generating over $2 million in revenues per year. Presently under construction are several major regional parks that will benefit the general public.

The Park Authority has acquired 8,000 acres (3,200 ha) of land in its 20 years of existence. One of the most significant acquisitions was the recent purchase of the abandoned Washington and Old Dominion Railroad right-of-way from the Virginia Electric and Power Company (VEPCO). NVRPA is developing the right-of-way into a hiking-biking-horseback riding trail known as the W&OD Railroad Regional Park. It is 42 miles (67.2 km) long, 100 feet (30m) wide and comprises 480 acres (192 ha) of land. The trail starts in Alexandria and extends through the northern Virginia countryside to Purcellville in Loudoun County.

Right-of-Way Purchase Agreement

For nearly ten years the Northern Virginia Regional Park Authority sought to acquire the right-of-way from VEPCO through donation, lease, or any conceivable method other than outright purchase. The bottom line rested with VEPCO, which insisted that the right-of-way be purchased. After a successful bond referendum to gather the seed money necessary to begin acquisition of the land from VEPCO, the Park Authority was fortunate in getting cooperation and assistance from many individuals and agencies.

First of all, VEPCO agreed to a firm price for the acquisition as long as it took place within a five-year time period. At present, NVRPA has acquired 40 of the total 42 miles (64 of the 67.2 km) of right-of-way.

State and Federal Aid

A grant was received from the Virginia Commission of Outdoor Recreation which permitted NVRPA to acquire most of the right-of-way.

Further assistance came from the Heritage Conservation and Recreation Service of the U.S. Department of the Interior in the form of a grant from its "Rails to Trails" program. This enabled the Authority to open and fully develop the trail from Falls Church, Virginia, to the Town of Vienna, a distance of approximately six miles (9.6 km). This section also included the construction of an eight-foot (2.4 m) wide strip of asphalt with landscaping and other scenic improvements in areas where neighbors of the trail indicated a desire for such projects.

NVRPA also received excellent cooperation from the Virginia Department of Highways and Transportation. The Department has constructed bridges for the trail over major highways in the area, at a cost of approximately $500,000. As trail development moves westward, the Park Authority is optimistic that this cooperation will continue in order to provide safe crossings at other major highways.

Local Partnerships

Park and recreation directors in the communities that the trail traverses have been extremely helpful and supportive of the project, as it enhances their own trail systems. In many cases, the trail presents an opportunity for them to use the land to enhance the park and recreation facilities within their jurisdiction.

Students from the local Community College practiced their clown act at the W&OD opening to the delight of youngsters. NVRPA

The bridle path, with its pleasant rural setting, lies within easy access of Washington, DC city dwellers. NVRPA

The grand opening of the trail was an old-fashioned community fair, attended by thousands of local residents. The train in the foreground is a replica of an old W&OD model. NVRPA

In Falls Church, for example, the Park Authority obtained monies from garden clubs and other organizations to do extensive landscaping on a two-mile (3.2 km) section within the city. Another donation was received from the Historic Preservation Society of Falls Church for construction of a wayside along the trail.

Local pony clubs and horse societies are cooperating in the planning process for an adjacent bridle path, separate from the hiking-biking trail. Members of these organizations meet regularly with NVRPA staff, giving constant guidance on trail construction. Local hiking and biking clubs, likewise, have lent complete support and aid to the planning and development of the trail, and the Northern Virginia Chapter of the Virginia Society of Ornithology has identified more than 100 species of birds near the park.

Finally, the *Design* series of the Park Practice Program has been used regularly as a source of ideas and inspiration as NVRPA park development is planned.

Partnership Magnifies Potential

While the W&OD Railroad Regional Park is one of the most complex projects NVRPA has undertaken in its 20-year history, it illustrates what can be accomplished through partnership and cooperation on a regional basis. No one agency could have implemented this project alone.

It is estimated that the total public investment for this trail, when completed, will be nearly $6 million. This includes approximately $3 million for land acquisition and $3 million for development.

The W&OD Railroad Regional Park is fast becoming a major trail for walkers, cyclists, horseback riders, and joggers. Further potential exists for this park to serve as the backbone of a commuter trail system through northern Virginia. This would enable people not only to ride, jog, or hike for pleasure, but also would provide them with an alternate means of transportation to their jobs.

Hundreds of bicycle riders formed a parade along the trail as they rode to the site of opening day ceremonies for the W&OD trail. NVRPA

Other possibilities include future connections with neighboring trails, such as the Appalachian Trail, the C&O Canal Path, the Four Mile Run Trail, and the National Park Service bike trail along the Potomac River.

From an operational standpoint, cooperation is the key word. For example, NVRPA depends on the law enforcement agencies of the various political subdivisions through which the trail passes to ensure proper safety for users and to enforce NVRPA rules and regulations. Local police and sheriff's departments have given excellent support in this area.

Since the trail is starting to be used more heavily, local recreation departments are building parks or other types of recreation areas adjacent to the trail. For example, in Vienna the trail lies within a few feet of the town recreation complex and is adjacent to its athletic fields. Fairfax County has acquired a number of sites adjacent to the trail for future park use. In Herndon, the W&OD trail bisects a new golf course and is near the new community center. Moving westward, the Loudoun County Board of Supervisors just last month approved the purchase of land on Goose Creek, which is adjacent to the W&OD trail, for the first county park.

Further cooperation took place in Leesburg when the NVRPA staff volunteered its services, at no cost, to master plan parkland adjacent to the trail for the local county park system.

In summary, the successful operation of the W&OD trail is dependent upon the cooperative attitude of nearly everybody in northern Virginia. Such broad cooperation is essential given the nature of the project. The integrity of the trail will survive only with the total cooperation of the many individuals who control the destiny of all types of future planning and the implementation of new services to meet new needs in northern Virginia.

Darrell G. Winslow is Executive Director of the Northern Virginia Regional Park Authority (NVRPA).

Partnership Dynamics

by Howard Levitt and Ray Murray

Item: Kaiser Aluminum and Chemical Corporation "adopts" Roberts Regional Park in Oakland, California. Benefits to the users of the East Bay Regional Park System: $50,000 per year. Benefits to Kaiser: Extensive positive public relations and a sense of involvement for Kaiser employees.

Item: Georgia-Pacific Lumber Company donates 70 acres (28 ha) to the City of Crossett, Arkansas for a new community park. Benefits to the citizens of Crossett: Land valued at $120,000. Benefits to Georgia-Pacific: Nationwide recognition and economic advantages.

Item: The Koshland family donates funds for the acquisition and development of a park in a park-deficient area of San Francisco. Benefits to the citizens of San Francisco: A $300,000 contribution, largest single private donation in 41 years. Benefits to the Koshland family: A lasting birthday legacy for the "man who has everything."

Item: Private foundations, corporations, and individuals in the community contribute dollars, materials, and expertise worth almost $1 million to convert an obsolete New York City asphalt plant to an indoor/outdoor recreation facility. Benefits to the residents of Yorkville and the Citizen's Committee for the Asphalt Green: Development of the only green open space within miles, plus a new sense of community involvement. Benefits to the donors: Tax benefits, favorable publicity, and a sense of accomplishment of a "miraculous" transformation.

These examples are merely a small sample of the kinds of public/private partnerships possible. In this Partnership issue of *Trends*, many other kinds of partnership arrangements are described. This article explores the "why and how" of partnership—why the private sector is motivated to become involved in the cause of public recreation and how these motivations can be used to foster partnership.

When do partnerships work? The answer is simple. Partnerships work when each party involved derives a benefit. Partnerships operate on a basic principle of social interaction, the *Exchange Principle*.

Under the Exchange Principle, partners in a transaction may gain in equal or different kind (money, goods, services) and quantity. However a partnership transaction is constructed, something is gained by both partners. Understanding the economic, personal, and professional agendas which motivate your potential partner is a crucial first step in forging strong partnerships.

The Embarcadero Center

Economic Incentives

The tax laws of our country encourage the donation of land, cash, and goods to public park and recreation agencies and nonprofit, tax-exempt organizations which work for the public good. Within prescribed limits, the value of donations made to public and nonprofit recreation agencies is deductible dollar for dollar from the donor's pre-tax income. Through this deductibility, donations serve to lower an individual's or a corporation's tax exposure by lessening the amount on which they are taxed. In some cases this even may shift a taxpayer into a lower tax bracket.

Consequently, a dollar donated to public recreation costs the donor less than a dollar. For most corporations, a donation of one dollar costs 54¢ in corporate assets, since the corporate income tax rate is generally 46 percent. For individuals, too, a similar benefit results, depending on their tax bracket. In certain land donation partnerships, these income tax benefits may be coupled with other tax benefits to create situations in which an individual or corporation actually makes money by donating recreation property to a public or nonprofit agency.

Tax benefits aren't the only economic incentives to public/private recreation partnerships. Many corporations understand that improving a community's recreation resources also stimulates employee morale, fitness, and productivity.

In San Francisco, the Hyatt Regency Hotel underwrote the installation of a public fitness trail on property surrounding the hotel. The reason? An enhanced environment attracts fitness-oriented guests to the hotel.

A nearby commercial/office complex, the Embarcadero Center, adopted a heavily used adjacent city park to provide a high level of maintenance which the San Francisco Department of Recreation and Parks was hard pressed to deliver due to funding cuts. In this same spirit of combined economic self-interest and urban community service, selected urban and suburban recreation areas across the country are being assisted by corporations and businesses.

Of course, it is clearly in the economic self-interest of builders, real estate companies, neighborhood groups, and home and apartment owners to contribute materials and labor to create and maintain the well-being of community recreation resources. The presence of high-quality recreation spaces, facilities, and programs can mean literally thousands of dollars in added value to homes and investment properties. For example, a study of economic benefits related to the East Bay Regional Park District revealed a three to nine percent higher value in property located within a half-mile (.8 km) of its park units.

Economic incentives can be viewed from still another perspective. A compelling motivation for involvement of all sectors of society in recreation partnerships is the connection between lack of recreation facilities and programs and the incidence of crime, particularly youth crime. A very effective fundraising campaign was initiated by the Southgate Recreation and Park District in Sacramento County, California, in cooperation with a local television station. A series of public service shots were aired which posed the question, "Where will kids turn for fun if public recreation opportunities aren't available?" Vandalism and mischief can be very costly.

Both tax and public relations benefits help motivate businesses to sponsor local parks.
Lawrence Halprin and Associates

Businesses and corporations spend from thousands to millions of dollars on advertising. More and more firms are recognizing the hard dollar value of the free positive publicity that can be generated around a solid public-private partnership.

Personal and Professional Agendas

Partnerships are made by people. Each person has personal and professional agendas which motivate him or her to react positively or negatively to a proposal. Assessing a prospective partner's personal and professional agendas will enable you to pitch your proposal accurately and cement the partnership.

A personal agenda is made up of a person's basic interests apart from those associated with his or her professional career. People are interested in actions that will benefit their family members, friends, church, clubs, service organizations, leisure pursuits, and social vision. A personal agenda is shaped by bloodlines, friendships, and personal beliefs.

A factor in forging one corporate/public agency partnership was that the partnership benefitted a park in which the key corporate decisionmaker's daughter had spent enjoyable summer vacation days. Many people have personal interests related to parks and recreation.

Professional agendas are based on how a person perceives his or her job responsibilities and career advancement goals. For an elected official, professional agenda items probably include implementing campaign platforms, getting re-elected, and establishing a record of accomplishment in office. In a recent issue of *Fortune*, an article noted that to ascend the corporate ladder today, executives need civic involvement activities in their resumes. Activities benefitting public recreation can strengthen the professional agendas of these business leaders. Most decisionmakers are concerned about responsible allocations of dollars, value received for value given, effectiveness measurement, and demonstrable results.

The importance of assessing and relating to personal and professional agendas is crucial to selling your partnership proposal. Opportunities exist for building solid linkages in even the most adverse situations. A negotiation involving a corporate-owned coastal property in Texas evolved from an impasse to a constructive dialogue after the person making the proposal diverted the conversation temporarily away from the negotiation. She recognized that the corporate executive was wearing a class ring from her alma mater; a brief conversation on common campus experiences put the executive in a more helpful frame of mind.

Richard Spees, Vice President of Kaiser Aluminum and Chemical Corporation in Oakland, California, and a friend of public recreation has commented, "Americans are a partnering people. Our problems are too complex for a separate group or sector to handle by itself." This American proclivity to partnership may be at the heart of the noneconomic reasons for public/private partnerships. We like to join forces and pitch in to solve problems.

Some people contribute to public recreation out of a desire to simply "do good" or to "leave a mark." Some people are motivated by guilt and make generous contributions as a balm to their conscience. Some people have special emotional reasons for wishing to help public recreation—a memorial to a deceased parent, a relative with a physical handicap, a sense that recreation programs provided enjoyment, enrichment, or even "straightened them out" as a youth. Some individuals feel that government is too important to be left to the civil servants, that their advice and assistance can improve public services.

Unlike individuals, corporations operate on a profit margin and cannot make contributions for strictly noneconomic reasons. However, corporations are made up of individuals with the full range of personal motivations. An effective public or nonprofit partnership negotiator first will define the economic advantages in forging alliances with corporations and businesses, then will discuss the reinforcing noneconomic motivations of the corporate decisionmakers. Because a favorable public image means so much economically to a corporation or business, a contribution to the cause of public recreation usually will serve both the corporation's economic needs and the noneconomic needs of its personnel. Cornel Meier, President of Kaiser Aluminum and Chemical Corporation, in describing his company's experience in helping public recreation to other major firms in northern California, first enumerated the economic advantages, but concluded that the prime advantage to Kaiser was that "Involvement in helping public recreation is fun!" He went on to describe how adopting a park provided Kaiser employees who volunteered their time to help construct a play structure an opportunity to get to know each other better outside the workplace and to feel that their employer was a force for social betterment. Furthermore, many Kaiser employees in Oakland are users of the park.

The Systematic Approach—A Prelude to Partnership

One way to build an effective private sector partnership program is to utilize a systematic, three-step process of inventory, analysis, and implementation.

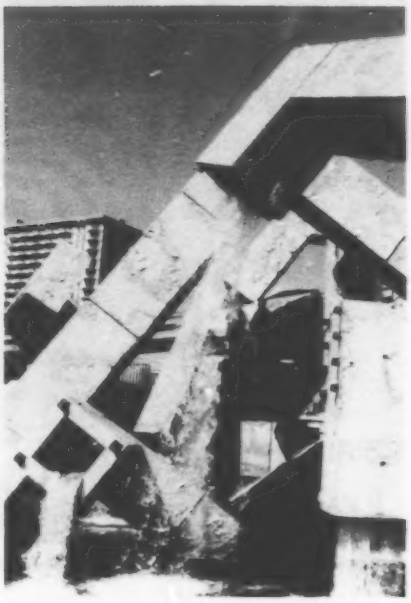
1. *The Inventory* stage consists of identifying:

- *Your agency's needs.* What are the dollar, material, equipment, and expertise needs of your agency? Make a detailed list, by category.
- *Existing sources of assistance.* Where does your present funding and other assistance come from? List them, and note which could be better utilized.
- *Private sector resources.* Using field surveys, personal knowledge, chamber of commerce lists, yellow pages, etc., list as many private sector resources as possible. Include vacant or underutilized private lands or buildings.
- *Public and private underutilized lands and facilities.* Check with the planning department for aerial photos. Identify those parcels and facilities which might have recreation potential.

From the outset, it is advisable to involve your collective agency brainpower and utilize the insights and ideas of field staff members who know the community and agency needs on a firsthand basis. Having compiled lists of needs, resources, lands, and facilities, you are ready to begin phase two.

2. *The Analysis* is a critical step in the systematic approach of the private sector. It is during this phase that an imaginative program administrator and his or her staff analyze the private sector for ways that its products, services, and skills can be related to the agency's identified program needs. In this phase, public or nonprofit agency needs are matched with the likely private sector sources of assistance.

During the analysis phase, do as much detective work as possible about your key private sector resources. For corporations, find out: Where are they located? What do they sell/produce? What is their economic situation? What is their community profile? How can they satisfy a public recreation need? Who makes decisions? Do they need favorable publicity?



A business-government partnership provides upkeep for Vaillancourt Fountain; a focal point of San Francisco's Justin Herman Plaza.
The Embarcadero Center

Look beyond the obvious. Sure, a construction company can donate labor, equipment, or materials, but maybe it also can provide valuable advice on maintenance practices.

Do your homework on individuals too: Where do the influential people live? Where do they work? What is their economic and social status? Are they known to be charitable? If so, to what causes? What are their leisure-related interests? Are there some personal motivations that might be pertinent? What is your best initial appeal to potential donors? Who are their friends and relatives? Does anyone connected with your organization have an "in" with these key individuals?

Remember to analyze corporation and business decisionmakers as individuals. Then attempt to relate both to their personal and professional motivations.

Once you have determined what private sector resources exist in your community and how they might assist in providing money, materials, or labor to your agency or organization, your groundwork has been laid for phase three.

3. *The Implementation* of a private sector involvement partnership program involves: a) determining the scope of the partnership effort—systemwide, neighborhood, or project-specific; b) selecting a mechanism or combination of mechanisms to get the partnership underway; c) deciding on a direction of approach; d) considering the timing of the approach; and e) following through on all private sector initiatives.

- *Scope.* Some partnerships are best geared to accomplishing a specific component of a project. Others lend themselves to serving a particular neighborhood. Still other partnership ventures address needs of the entire agency or organization. You will need to create a variety of partnerships to satisfy different needs.
- *Mechanisms.* There are any number of mechanisms that may be used to create partnerships. A "friends" type foundation may be needed to help accomplish a systematic fundraising effort. A "gifts catalog," listing your specific needs and their costs, may be the perfect vehicle to market your needs to potential donors including the service clubs in your community. A coordinated volunteer program may augment your limited personnel resources. A scrounging program to gather someone's recyclable or reusable castoffs might expand both community involvement and environmental awareness. A joint project with an industrial recreation provider could be mutually reinforcing.
  The HCRS Information Exchange can provide publications which describe various mechanisms. See "Who Can You Turn To?" in this issue of *Trends* for Information Exchange membership information.
- *Direction of Approach.* What specific individuals, businesses, or groups of businesses will be enlisted as partners in providing a recreation opportunity? Within a corporation or business, which individual will you approach first?
  A good rule of thumb: Aim as high as you can for the person who can say yes. There is a corporate adage that everyone but the top executive is paid to say no. Use sympathetic contacts within the company to present your case. Decisionmakers often are more easily swayed by another member of their peer group. Public relations or community relations vice presidents often can see the value of good partnership efforts. Members of the Boards of Directors also can be effective in winning favorable decisions.

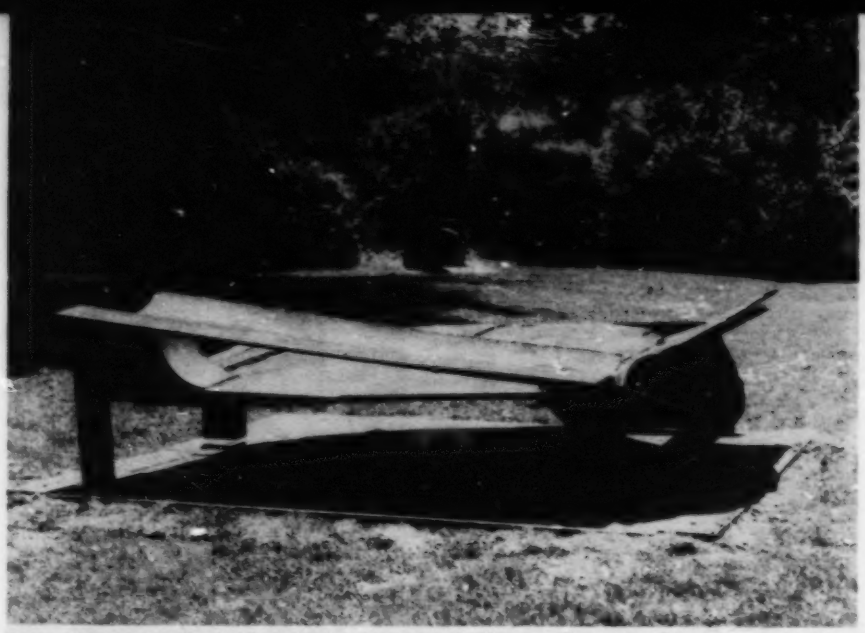
- *Timing*. Be aware of the tax year. Corporate tax years vary, so research each corporation's tax year during your analysis phase. Check annual reports for this information. Make your appeal early in the tax year, though your proposal may not be approved until the end of the year when the corporate profit picture is clearest. Watch out for reorganization periods. They are poor times to make your initial approach. Notice when a corporation or an individual could benefit from good publicity and allow your partnership project to serve that end.
- *Follow through*. Be certain to publicize private sector generosity unless specifically requested not to do so. Publicity often stimulates more generosity. In St. Louis County, Missouri, the publicity surrounding a land donation resulted in three additional offers within a few weeks. Remember that most corporations, and many individuals, give in order to gain public exposure and recognition. This legitimate need should be respected. So, too, should a request for anonymity. At the very least, each act of private sector generosity deserves a sincere thank you. Some contributions merit a ceremony, others a written letter of appreciation from the Mayor or Chief Executive. Still others may warrant the naming a park or structure to commemorate an especially generous private sector partner. We all love to be recognized for our good work. It fires us up to do even more.

Making a proposal

Your systematic private sector process will surface suitable potential partners. How do you actually enlist their support? The answer varies with the circumstances, but there are some basic tips for "selling" a potential partner on the benefits of assisting your agency:

1. *Initiate contact through allies.*

If the key person who can say yes to a partnership is not known personally to you or someone on your staff, try to enlist an ally to initiate contact. You may not imagine yourself even indirectly connected with a decisionmaker in a large multi-national corporation, but you might be surprised. A few years ago, HCRS sought an ally for an approach to one of the very largest international conglomerates. As we discovered, the father of an HCRS employee sat on the Board of Directors of the firm in question. We had our ally, made our approach, and ultimately sold the corporation on a bargain sale to a public agency that saved the public $1.2 million. Cultivate contacts through membership in professional organizations, service clubs, and civic groups.



Private donations produced both the land and sculpture for St. Louis County's striking Laumeier Park.
Gretta Kraft

2. *Arrange a personal meeting.*

There is no substitute for a face-to-face meeting with a potential partner, try hard to get one. A personal meeting humanizes your appeal and makes it harder to say no. Before the meeting, spend some time with your staff rehearsing the proposal. Try to find missing points or weak arguments. When the big day comes, relax and be confident. You'll be meeting with a fellow human being.

3. *Prepare a written proposal.*

For many kinds of partnerships—cash contributions, land donations, etc.—it is important to prepare a concise written proposal. The proposal should specify what you want, why you want it, what the result will be, what's in it for the donor/contributor, and how you intend to recognize the gift. It should be brief, no longer than two pages, and sufficient to allow the potential donor to weigh your request after the initial proposal is made. Leave several copies with the prospective donor, or mail copies before the meeting if the donor desires.

4. *Follow up on the initial contact.*

If a prospective donor requests additional information, provide it immediately. If you meet with a positive response, arrange to accept the gift or contribution as quickly as possible. Many contributions are made in the heat of passion and depend on fast action on your part. If the initial reaction is negative, try again. Many donors like to be courted. Some deliberately say no to test your staying power. Walk the line between persistence and annoyance. Your own sensitivity will tell you where that line falls.

5. *Provide recognition.*

If the most appropriate form of recognition will take a bit of time to arrange, convey official gratitude immediately. Be sure to provide at least as much publicity and recognition as you implied you would.

Corporate Business Partnerships

Some corporations are very generous and are well recognized for their public spirit. Most corporations, however, are not in the habit of making contributions. In fact, only about 6 percent of the 1.7 million corporations in this country make any charitable contributions, and only a small percentage of the money given benefits public recreation. We believe that the partnership potential between recreation agencies or organizations and the corporate sector has only just begun to be explored.

Partnership arrangements can pool or loan transportation resources. Gateway NRA

Consider some of the ways in which corporations and businesses can assist public recreation:

—Loaned executives
—Loaned equipment
—Volunteer labor
—Loaned/shared facilities
—Training
—Joint purchases
—Efficiency analysis
—Transportation
—Professional services
—Computer time
—Public relations
—Funding
—Data management
—Land
—Sponsorships
—Endowment funds
—Foundations
—Insurance coverage
—Endorsements
—Adopt-a-park or program

These are just a few of the possible interactions between recreation agencies and the corporate sector. To create effective partnerships with corporations, you must be thorough in your planning and marketing. Judith Berger, a research consultant from Mill Valley, California, in an excellent article in the September 1979 issue of *Western City* magazine, titled "Getting Together With Business," describes the components of successful private sector partnership.

1. *Mutuality of interest.*

Business usually can sense what is in its best interests, but as a public agency administrator selling a partnership, you should clearly outline your perception of everyone's economic and noneconomic advantages from the partnership. This will help your corporate partner sell its stockholders and Board of Directors.

2. *Equal ownership of program.*

According to Harry Reichner, Executive Vice President, Philadelphia Chamber of Commerce, "That means equal representation and participation and financial support." Most corporations prefer that their contributions leverage additional financial support from other sources.

3. *Minimum red tape.*

If you expect enthusiastic participation from the corporate sector in helping your agency, you're well advised to smooth your own decisionmaking processes and procedures to minimize delay and other red tape. Government red tape is a red flag to the corporate sector. Also, the business community prides itself on immediate results.

4. *Strong symbolic leadership.*

As Jim Hagarty, of the Public Affairs Department of Pacific Telephone, notes, "Top people have to be involved at the outset; they are the ones with the resources." This is two-sided advice: top people from both the public agency and corporate partner should be involved.

5. *Adequate organization.*

"You need a structure that gets things done, a working Board of Directors with very active committees, and competent staff to formulate plans and carry them out." So says Jack Fitzpatrick, Senior Vice President, National Alliance of Business. Don't approach a corporation unless you have gotten your own act together, and designed a workable framework for corporate involvement.

6. *Product and process.*

The private sector doesn't like to undertake a project without an end date and product. The process is important, but the product must be the prime objective.

Establishing Corporate Partnerships

Ms. Berger outlines six steps to take in establishing partnerships:

1. *Identify community needs and priorities.*

This is the first step in approaching any private sector resource. Involve your entire administrative and field staff, and other department heads as well. Try for a consensus on problems and a commitment to enlist private sector help. If you cannot get the support and commitment of public agency personnel, it is unlikely that the corporate sector will commit its valuable time and resources.

2. *Approach visible business leaders with headquarters in your city.*

Approach them with an identification of the problems, a rationale for business involvement centering around mutual benefit, and an invitation to an informal meeting to share information and perspectives. Aim for top decisionmakers in the corporate heirarchy.

3. *Ask the business community for advice and ideas; return with a request for assistance.*

Dick Spees of Kaiser Aluminum comments, "A prestructured project that comes to the private sector from government is unlikely to succeed—rightly or wrongly. Come to the business community with a need, not a structure."

4. *Jointly establish a structure conducive to producing results.*

How to get the job done depends upon who has the best combination of experience and resources. The structure should be worked out by all parties to the partnership.

5. *Mount a communications campaign.*

Let people know, through press releases, feature articles, and speeches, what they can do to make a private sector partnership work.

6. *Anticipate problems.*

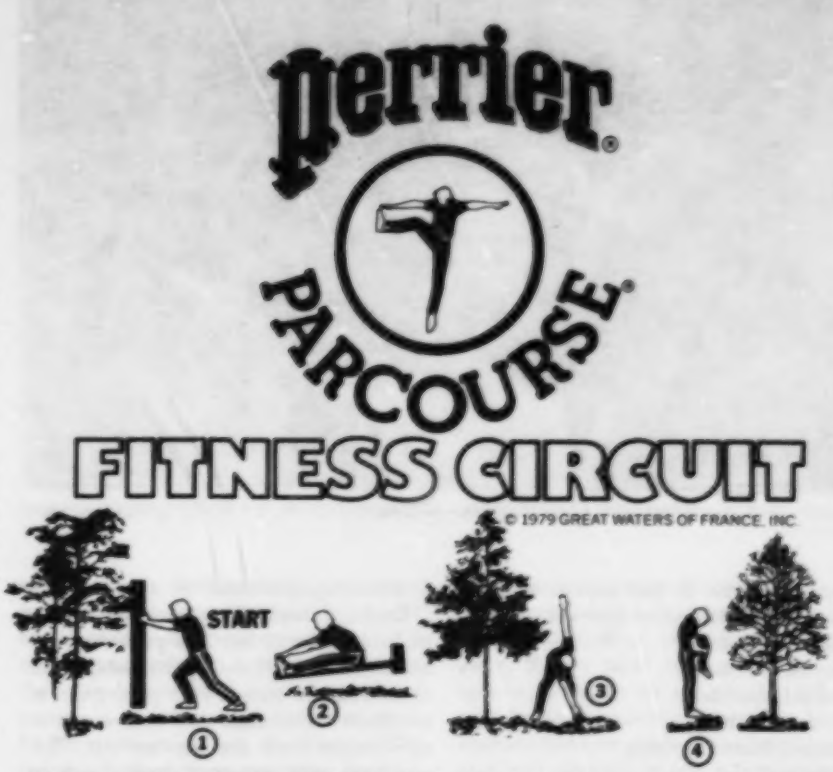
These may include arguments over who takes credit for accomplishments, frustrating delays, and business reluctance to "serve on another committee."

Soliciting Land Donations

The full or partial donation of land is a special realm of private sector partnership. It involves a basic understanding of income, real estate, and capital gains tax laws, other economic and noneconomic motivations, and a liberal dose of the art of negotiation. Through land acquisition solicitation, millions of dollars worth of property is added to the public recreation estate each year at little or no cost to the public agency. Some agencies have been very effective at soliciting land donations. Seventy-five percent of the St. Louis County Park System is the result of private sector donations.

As mentioned earlier, there are situations in which a landowner can make more money by donating a property to a recreation agency or organization than by selling it for its full fair market value. This can occur when the landowner has a high adjusted gross income, and the property was originally acquired at a very low price and has greatly appreciated in value. In a donation transaction, the value of the donation, which is deductible against taxable income, may be worth more than the net return from a sale, when selling expenses and capital gain taxes have been deducted from the net return.

In addition to tax exposure and selling expenses, a landowner attempting to sell property also has certain holding costs: property taxes, insurance costs, maintenance costs, policing costs. These holding costs cut into the profit from a sale and constitute points to raise in proposing a donation or bargain sale. An HCRS publication, *Land Conservation and Preservation Techniques*, available from the HCRS Information Exchange, describes in detail the economic dynamics of land transactions.



The Parcourse Fitness Circuits, established by Perrier in parks across the country, represent the growing interest of business in recreation partnerships. Perrier/Great Waters of France, Inc.

Once a reasonably strong economic case has been made, the noneconomic motivations come into play and may tip the scale in favor of a donation or bargain sale. Obviously there are situations when the noneconomic motives alone will prevail, such as when a landowner wishes to leave a legacy. What better legacy than a public recreation resource, particularly if it bears the donor's name?

Some land negotiation tips to keep in mind:

1. *Develop a set of options.*

Your written proposal should have a full range of options with the advantages and disadvantages of each briefly enumerated. A summary sheet is also helpful.

2. *Don't misrepresent yourself.*

In making a land solicitation, your goal is to sell the *concept* of a donation or bargain sale. To do so will involve making some assumptions as to the donor's income, the original cost, and the current value of the property. Unless you are a tax attorney or accountant, don't leave the impression that you are. If you can sell the concept, the prospective donor will turn the project over to his or her own financial experts for fine tuning.

3. *Prepare to negotiate.*

Corporations, in particular, are used to negotiating with public agencies. Be clear before you enter negotiations what your agency can and cannot do—how much public money is available, for example. Listen carefully to the donor's concerns and be responsive to them. Remember, too, that the value of a full or partial land donation is tax deductible only if it is made gratuitously. If a donation results from a zoning variance on another parcel owned by the donor, it is not considered a charitable contribution.

4. *Watch other laws and regulations.*

Keep in mind that if federal or state grant funds will be used in development of a donated site, that the Uniform Relocation Act (PL 91-646) and its state equivalents apply. Simply stated, this means the donor must be made aware of the property's fair market value, and his or her right to receive full value compensation. Also keep in mind grant regulations that can affect the timing and val-

uation of land donations.

5. *Be patient.*

Land donations can take months or years to accomplish.

Foundation Grant Seeking

Foundations are of two varieties—public and private. The primary difference is in the source of support. Public foundations generally receive their funding from annual membership fees, small contributions, and grants from private foundations. Private foundations are those which exist to give money away.

Soliciting foundations is a stylized and formal process. Private foundations contribute over $2 billion annually to charitable causes. Yet the public and nonprofit recreation community has not been a significant recipient of foundation funds.

Nationwide, less than 2 percent of all foundation giving is assisting recreation. Of 400 foundations surveyed in California by HCRS in 1976, only 60 indicated an interest in recreation-related projects.

But private foundations have been major benefactors of some recreation projects. The Heritage Park project in Ft. Worth, Texas, received grants of $260,000 from the Sid Richardson Foundation and $206,000 from the Amon G. Carter Foundation. Much more could be done by recreation providers to tap into the foundation funding-pool. Some things to bear in mind in soliciting foundation grants are:

1. *Prepare yourself.*

There are literally thousands of foundations, large and small, and competition for grants always is intense. To be successful, you will need to learn the vocabulary, understand the application process, and perfect grant writing skills. Training in fundraising is readily available from a variety of sources, and we highly recommend it.

2. *Tailor the approach.*

Utilize foundation reference books to learn a particular foundation's application procedure. In general, foundations prefer a brief initial letter of explanation. If they are interested, they will ask for a more detailed proposal.

3. *Determine funding goals.*

To economize on your foundation fundraising effort, eliminate from consideration those foundations which do not fund projects or programs applicable to your agency. Be realistic. It's a poor idea to radically alter your grant proposal to suit the not-too-compatible objectives of a particular foundation. It's better to spend extra time lengthening your list of compatible foundations.

Some foundations cannot or will not fund governmental institutions. A "friends" foundation might overcome that obstacle. It's also important to remember that most foundations are looking to fund prototype short-term projects, or provide seed money for ongoing efforts. A proposal to fund recurring personnel expenses will have a tough time.

4. *Use personal contacts.*

Because most foundations must consider so many more outstanding proposals than they can possibly fund, the role of personal contact assumes greater importance.

5. *Share information.*

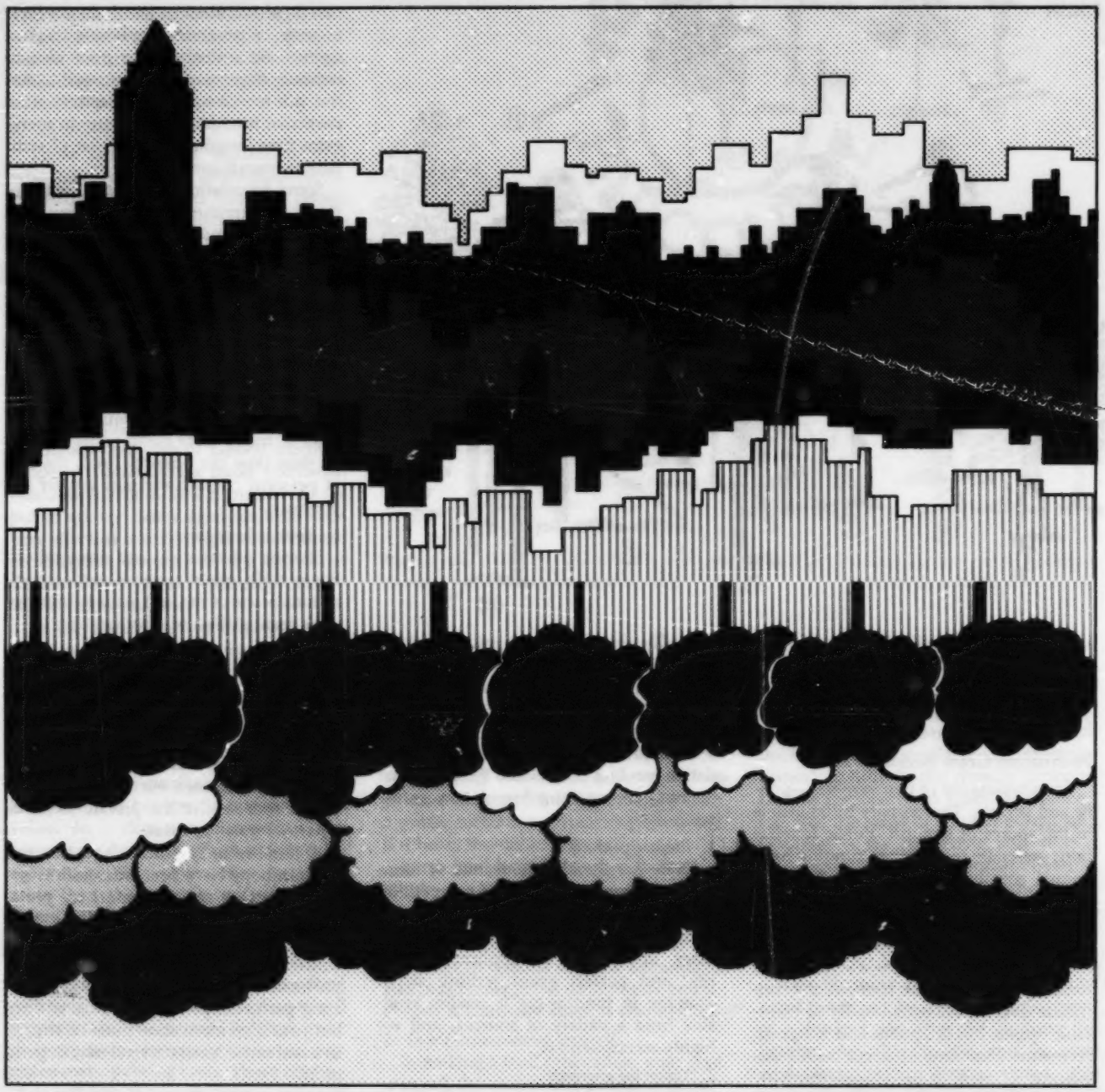
Sharing information and proposal critiques with other agencies and organizations is one of the best ways to improve your grant skills and effectiveness.

Wrap Up

We have briefly surveyed some of the ways private sector partnerships can be built. As tax support for governmental services lessens, and as the need for self-sufficiency becomes even more imperative, a shift toward the private sector as a partner must be made.

A number of recreation agencies and organizations have been successfully soliciting private sector support for years. Others have recently entered the field with enthusiasm and great effectiveness. Understanding economic, personal, and professional motivations is the key to creating partnerships. The potential is there but your own motivation must be strong. In a real sense, your survival may depend on it.

Howard Levitt and Ray Murray are with the Division of Planning and Technical Assistance in the Pacific Southwest Regional Office of the Heritage Conservation and Recreation Service.



HCRS: A Partner and a Partnership Broker

by Meg Maguire

1980. Start of a decade. Time for reflection and projection. What will the future hold? How will those issues we work on—environmental protection, recreation opportunities for all, preservation of our heritage, restoration of our cities—be affected by rapid convulsions in the economy? By energy exploration? By a distrust of government?

There are no fixed answers here—few guideposts for the times in which we live. But one thing is sure: innovation both in our institutional arrangements and our human communications is a top priority.

My prognosis for the 1980s is that "doing your own thing" is out. It has cost us too much to turf fight, to duplicate, and to fragment our concerns.

What is coming in the 1980s is *partnership*, in which each party contributes *up to the limit* of its ability in order to realize its own objectives.

The Heritage Conservation and Recreation Service (HCRS) has worked in a variety of ways during the past three years toward partnership arrangements with state and local governments and private sector institutions. The administration of our three grant programs—the Land and Water Conservation Fund, the Urban Park and Recreation Recovery Program, and the Historic Preservation Fund—all reflect this intention.

HCRS is small as federal agencies go with about 600 permanent employees in Washington and the regional offices. Yet, the agency administers programs required to fulfill over 30 different pieces of legislation. In spite of our expanding and changing mission we do not feel that it is realistic to expect large increases in staff or funding. Rather, we try to use our limited resources to work with others for a multiplier or expansion effect—to benefit recreation and preservation.

Coordinated Federal Action for Recreation

One major front for this partnership strategy has been in coordinated action with other federal agencies where the joint benefits for recreation and other programs are just beginning to be seen. Recreation has strong relationships with the energy conservation priorities of the Department of Energy; the employment programs of the Department of Labor; the arts programs of the National Endowment for the Arts; the health and physical fitness goals of the Department of Health and Human Services; and the crime prevention strategies of the Department of Housing and Urban Development. Other agencies have found it to be in their *own self interest* to be partners with HCRS to achieve their priorities. They include:

Department of Energy—$60,000 has been provided to HCRS to support the development of an energy conservation training program directed specifically at parks and recreation. It will emphasize such issues as seasonal operations, lighting, maintenance and service operating hours, retrofitting, planning for energy efficiency, and life cycle costing. Our agency will also try to get a set-aside of grant funds to implement energy conservation in the training program.

Department of Labor—Funds have been provided to identify exemplary projects with employees funded by the Comprehensive Employment and Training Act (CETA) and which involve park and recreation activities. The identified projects will have to meet both Labor's interest in providing training to participants in preparation for long-term employment and HCRS' interest in establishing alternatives for meeting the labor needs of park and recreation agencies. Once identified, these exemplary projects will be documented and information given to interested people.

National Endowment for the Arts—Funds are being awarded to selected communities to plan for expanding high quality art and cultural opportunities in community parks and recreation facilities. This will serve the objectives of both the arts and recreation interests.

Department of Health and Human Services—Two separate agreements have been negotiated to increase recreational opportunities for the elderly and link physical fitness and mental health with community recreation systems. In this way, we are able to use some of the resources of HHS recreation and at the same time further the health promotion goals of that agency.

Department of Housing and Urban Development—This agreement emphasizes including a requirement for safe recreation facilities in housing and redevelopment projects. Recreational planning would be included in planning for housing projects to make them more livable and mitigate the high crime often found in these projects.

These interagency agreements, or "Memoranda of Understanding" as they are called in the federal government, are not simply bureaucratic exercises. They are intended to have direct practical benefits through coordinated funding, information or technical assistance for local communities. A very practical demonstration of partnership is in Houston, Texas. In 1979, HCRS signed a partnership agreement with Harris County, the City of Houston, and the State of Texas to develop for the first time in the city's history, a comprehensive approach to recreation and neighborhood preservation. A strong neighborhood outreach program has started; $16,000,000 in lands and other donations has been received; a major bond issue was passed; and the commitment by both the private and public sector to provide close-to-home urban recreational opportunities is leading to a visionary yet realistic parks and service master plan.

No longer can we consider recreation needs separately. We must forge new alliances to meet all the human needs of the people we serve. NPS

In Denver, Colorado, HCRS has begun a project with the Trust for Public Land to implement a neighborhood self-help program to acquire and develop recreation areas without using public funds. Aspects being tested include the formation of nonprofit, tax-exempt groups to acquire land or property that is not being used to its full potential.

HCRS also has helped start an Urban Waterfront Action Group which is a partnership of federal and private organizations dedicated to both the revitalization of urban waterfronts and development of their use for recreation. We also have conducted case studies of urban waterfront revitalization and published technical assistance materials to encourage these programs.

Technical Assistance

A vital link in the interlocking chain of partnerships is HCRS' role in providing technical assistance and information exchange. We serve as a conduit, learning from you and sharing your successes with others.

We have put a great deal of effort into developing ways of keeping you informed of current developments in the park and recreation field. The HCRS Information Exchange is a major way to share information. For a small investment of federal funds, the Exchange has become, in less than a year, a successful way to anticipate the information needs of the park and recreation professional and to respond to your urgent needs for information. In addition to continuing to provide you with information about materials of interest to recreation, we will provide information on exemplary projects in the field through our SHARE system.

The Park Practice Program which publishes TRENDS is another way we keep you informed by bringing you management information, how-to and design ideas.

HCRS is available to help answer questions, find solutions to problems and take advantage of opportunities. Each of HCRS' regional offices located in Anchorage, Alaska; Seattle, Washington; San Francisco, California; Denver, Colorado; Ann Arbor, Michigan; Atlanta, Georgia; Philadelphia, Pennsylvania; and Albuquerque, New Mexico provides advisory services to park and recreation professionals and organizations. HCRS staff are uniquely qualified to provide help in the use of volunteers, gifts catalogs, fundraising, use of donations and tax incentives, foundations, urban waterfront development, etc. We can also help with use of fees and charges, contract services, the impact of capital expenditures on future year maintenance budgets, and energy conservation.

There is much that we are doing; there is also much we are *not* doing that many of you perhaps think we should be. As a public agency we want to be responsive to your needs if we can be. To do this you must let us know what those needs are. Consider then, this article to be an invitation to a dialogue.

Conclusion

Other articles in this issue have covered some of these local partnerships in action. They challenge all of us in the 1980s to try to meet both recreation and other goals together and to undertake cooperative endeavors to expand recreation. Working together, the whole can be much greater than the sum of its parts. Partnerships offer us not only a way to survive, but also to excel.

Meg Maguire is the Associate Director for Recreation Programs for the Heritage Conservation and Recreation Service.

The HCRS Information Exchange

The HCRS Information Exchange depends on an informal network of contributors to continually expand its collection and contribute to the improved delivery of recreational/cultural services in the United States. In order to provide first class, up-to-date information, it asks members to contribute materials that will then be announced through a publication called *Technical Assistance NOTIFICATIONS*. Such materials would include significant newsletters, reports, journals, handbooks, films, brochures, surveys, publications, audio-visual aids, studies, program evaluations, and training manuals.

The HCRS Information Exchange welcomes any interested organization as a member. Simply request a membership form from:

The HCRS Information Exchange
U.S. Department of the Interior
Heritage Conservation and Recreation Service
440 G Street, NW
Washington, DC 20243

With membership you will receive *Technical Assistance NOTIFICATIONS*, which includes:

- Abstracts and order forms for *free* HCRS materials.
- Abstracts and ordering information for materials produced by Federal, State and local government agencies; private organizations, educational institutions, etc.
- A Calendar of Events listing upcoming conferences, workshops, training sessions, meetings, etc.
- Notices on matters of importance.

Regional Offices of the Heritage Conservation and Recreation Service can provide additional technical assistance and can refer park and recreation agencies to other Federal, State, local, and private sources of help on various matters.

Pacific Southwest Region
P.O. Box 36062
San Francisco, CA 94102
415/566-0182

Northwest Region
915 Second Avenue
Room 990
Seattle, WA 98174
206/442-4706

Mid-Continent Region
Box 25387
Denver Federal Center
Denver, CO 80225
303/234-6462

South Central Region
5000 Marble, NE
Room 211
Albuquerque, NM 87110
505/766-3515

Southeast Region
Richard B. Russell Federal Bldg.
75 Spring Street
Atlanta, GA 30303
404/221-3445

Lake Central Region
Federal Bldg.
Ann Arbor, MI 48107
313/668-2023

Northeast Region
Federal Office Bldg.
600 Arch Street
Philadelphia, PA 19106
215/597-7989

Alaska Area
1011 E. Tudor
Suite 297
Anchorage, AK 99503
907/277-1666

VOLUNTEER: The National Center for Citizen Involvement

This is a nonprofit organization dedicated to the growth of citizen volunteer efforts. Working through a network of associate organizations, Volunteer collects and disseminates current information, responds to the needs of volunteer leadership, and tests new ideas.

Local, regional, and national conferences focus on volunteer leadership development. The quarterly *Voluntary Action Leadership*, newsletter *Volunteering*, and bimonthly *Newsline* offer technical assistance and program-oriented information. Demonstration programs illustrate innovative volunteer efforts. Consultation and evaluation services assist a wide range of volunteer-involving programs.

Volunteer also monitors legislation and regulations affecting the volunteer community and, through sponsorship of National Volunteer Week, focuses public attention on the indispensable role private citizens play in community problem solving.

For further information on the organization's programs and services, write to VOLUNTEER: The National Center for Citizen Involvement at:

1214 16th Street, NW
Washington, DC 20036

or

P.O. Box 4179
Boulder, CO 80306

Other Sources of Help

National Association of Counties
1735 New York Avenue, NW
Washington, DC 20006

National Association of State Park Directors
% William R. Ryan, Chief
Div. of Parks & Recreation
Dept. of Environmental Management
83 Park Street
Providence, RI 02903

National League of Cities
1620 I Street, NW
Washington, DC 20006

National Recreation and Park Association
1601 N. Kent Street
Arlington, VA 22209

Partners for Livable Places
2120 P Street, NW
Washington, DC 20037
(See article by Tish Hunter in this issue of *Trends*)

U.S. Conference of Mayors
1620 I Street, NW
Washington, DC 20006

Cooperative ventures can bring exciting arts programming to people. NPS

Letter from Your Managing Editor

Dear Readers:

I hope you have enjoyed this issue of TRENDS as much as my staff and I have enjoyed the planning and pulling it together. We felt that "Partnerships for Survival" was a most appropriate theme for our first TRENDS published under the new cooperative arrangement between the Heritage Conservation and Recreation Service and the National Recreation and Park Association.

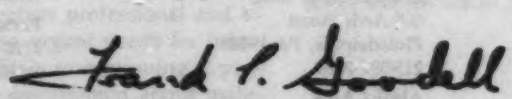
Our new "partnership" is an exciting step in a process that began 23 years ago. Some of our venerable readers may recall that the Park Practice Program emerged as the result of an agreement in 1956 between the National Park Service and the National Conference of State Parks to exchange technical and operational information between members of the park and recreation community. Over the years, the production of the program evolved into a cooperative agreement between the National Park Service and the National Recreation and Park Association, an umbrella organization which includes the National Society for Park Resources (formerly the National Conference of State Parks).

At the beginning of the 1980 Fiscal Year, Park Practice along with several other technical assistance programs was transferred by the Congress from the National Park Service to the Heritage Conservation and Recreation Service, a sister bureau within the Interior Department. HCRS has assumed the cooperative agreement with NRPA, and the program continues with HCRS preparing the contents of the publications, and NRPA printing and distributing them on a paid-subscription basis to the park and recreation community at large.

We envision an expanded role for our technical assistance publications, with TRENDS addressing issues of primary concern to a broader array of administrators and practitioners of park and recreation areas and facilities. The Summer 1980 TRENDS, well into the production stages, is entitled "The Park and Recreation Employee." It will focus on the workings, philosophies, and career development of those persons who make the park and recreation community such a challenging occupational field to work in and who provide the public with enjoyable experiences.

Future TRENDS issues are on the drawing board . . . reflecting readers' suggestions and topics of wide interest and appeal. If you have a particular subject you would like to see covered, please write to me and share your ideas with the Park Practice Program staff. Let's develop a "partnership" for the benefit of all!

Sincerely yours,



Frank C. Goodell
Managing Editor
Park Practice Program

☆ U.S. GOVERNMENT PRINTING OFFICE: 1980-626-245/2111-31

EXPLORE NEW HAPPENINGS IN PARK MANAGEMENT AND OPERATIONS WITH TRENDS

1975

Winter	Communications
Spring	Environmental Education
Summer	Marine Biology, Parks and Recreation around the World
Fall	Park and Recreation Programs

1976

Winter	Maintenance
Spring	Camping
Summer	Scientific Research Emphasis
Fall	Innovative Financing

1977

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Winter	Trends in Park Management
Spring	Serving Special Populations
Summer	Medley of Summer Concerns/Opportunities
Fall	Urban Park and Recreation Opportunities

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Winter	Energy Conservation & Environmental Education
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Summer	What's New in State Parks?
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1980

Winter	Safety and Occupational Health
Spring	Partnerships for Survival
Summer	The Park and Recreation Employee

For additional copies, back issues, or subscriptions to TRENDS, write to the National Recreation and Park Association, 1601 North Kent Street, Arlington, Virginia 22209.

Please send articles and comments to the Managing Editor, TRENDS.

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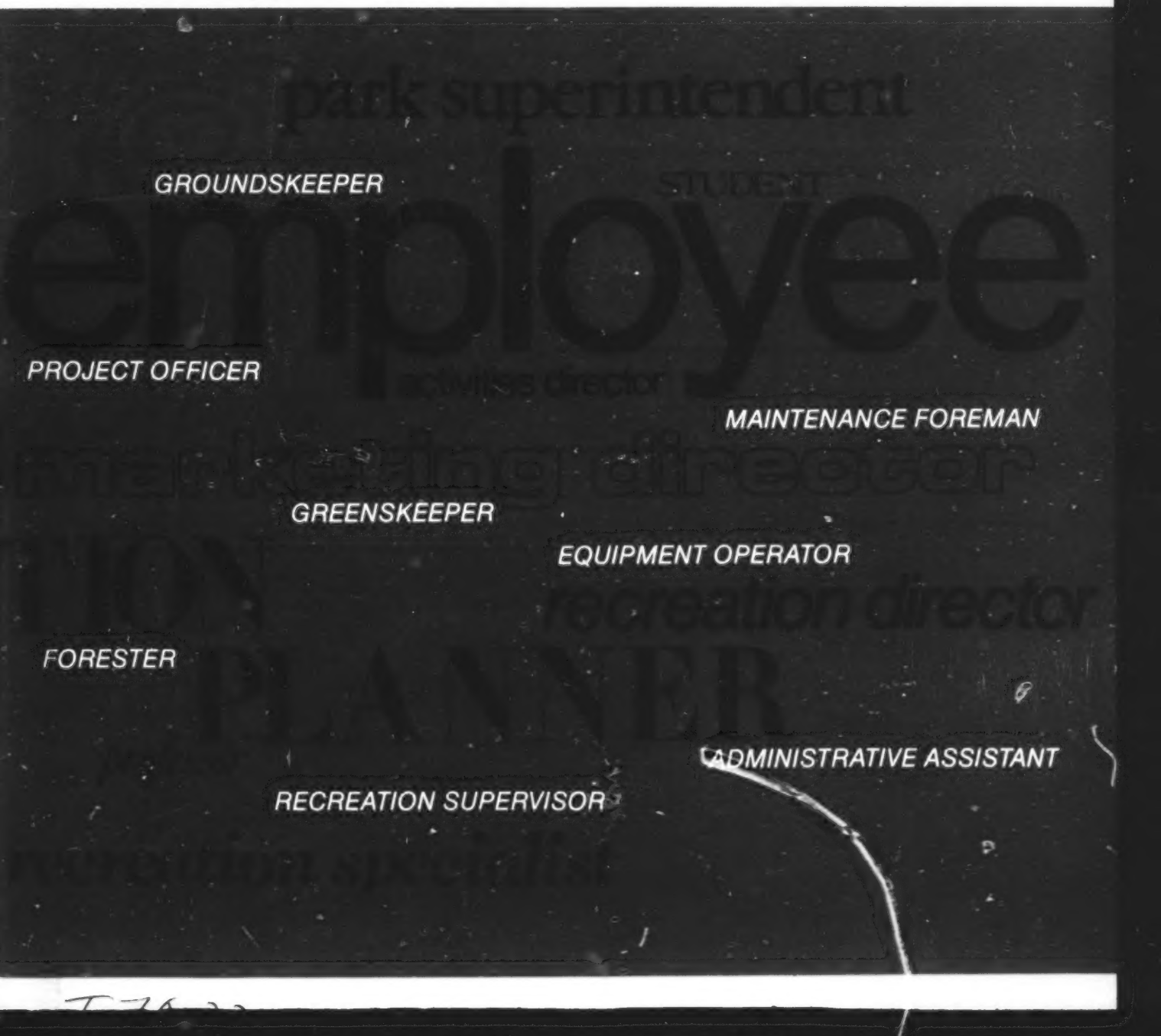
Trends

Summer 1980
Volume 17
Number 3

The Park and Recreation Employee



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Please send articles and comments to the Editor, TRENDS.

A publication of Park Practice

Park Practice is a cooperative effort of the Heritage Conservation and Recreation Service and the National Recreation and Park Association.

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Park Practice includes *Trends*, a quarterly publication on topics of general interest in park and recreation management and programming, *Grist*, a bimonthly publication on practical solutions to everyday problems in park and recreation operations and *Design*, a quarterly compendium of plans for park and recreation structures which demonstrate quality design and intelligent use of materials.

The information presented in any of the publications of Park Practice does not reflect an endorsement by the agencies sponsoring the program or the editors.

Articles, suggestions, ideas and comments are invited and should be sent to Park Practice, U.S. Department of the Interior, Heritage Conservation and Recreation Service, Division of Park and Recreation Technical Services, Washington, D.C. 20243.

Contents

The Park and Recreation Employee

2 Introduction
by Maureen Palmedo

3 Confessions of a Country Mouse
by Ellen Ruth Reiss
Perspectives on park and recreation employment in rural America

7 Gateway Boosts Urban Career Opportunities
by Herbert S. Cables, Jr.
Challenges and rewards of working in an urban recreation area

10 Urban Interpretive Services: An Investment in the Future
by Steven Kahn
California program prepares minority students for park and recreation work

13 Upward Mobility
by Dorothy Benton
A profile of success

17 Theme Park Employment
by Connie Desaulniers
Profile of The Old Country, Busch Gardens, VA

20 Goodyear's Approach
by Bernard A. Watts
Case study of recreation job opportunities within the industrial sector

23 The Industrial Recreation Boom
An interview with Patrick Stinson, Executive Director of the National Industrial Recreation Association

24 Meet Your Colleagues

24 Robert Conner, Therapeutic Recreation Specialist, Washington, DC Department of Recreation

26 Bill Matheson, Maintenance Supervisor, Fort Worden State Park, WA

28 Roy W. Feuchter, Director of Recreation Management, USDA Forest Service

29 Mary Alice Bivens, Director, Arizona Outdoor Recreation Coordinating Commission

30 Jon J. Gruver, Recreation Specialist, US Navy, Special Services

31 Marty Silver, Seasonal Interpreter and Park Naturalist, Warriors' Path State Park, TN

32 Preparing Park and Recreation Professionals Today
by Richard Kraus and Delores Williams
A critical look at educational trends and needs

37 Time for Change
by Karen Drucker
A student perspective on recreation education

39 Reaching Out to High-Risk Youth
by Robert Peterson
Helping Albuquerque's disadvantaged young people realize their potential

42 Guide to the Governmental Job Market
by Kevin Coyle and Carl Friedrich
How to look for a park or recreation job within a government agency

44 NRPA Employment Services
by Donald Henckel

47 Feedback Sheet

INTRODUCTION

This summer issue of TRENDS focuses on the park and recreation employee. In every park and every recreation area, whether it be nationally, state, locally, or privately administered, a number of individuals contribute their knowledge, skill, and labor to effect a particular mission. The combined efforts of these dedicated workers bring the American people the benefits of enlightened resource management, historic and cultural preservation, meaningful recreation, and numerous leisure services.

What interesting and varied people comprise the workforce of our field! As you'll see in the pages that follow, the term "park and recreation employee" covers a wide range of job descriptions and work environments. Today you'll find park and recreation colleagues in the inner city and rural countryside, in national forests and state parks, in universities and community preschools, in corporate facilities and military bases, theme parks and government offices.

Throughout this issue we've tried to illustrate how our field is growing and diversifying by taking a look at its people at work, at their training, job opportunities, and career development. This is a somewhat different approach for TRENDS, but one that we hope you'll find enjoyable and enlightening.

From various personal perspectives and profiles, you'll discover the current trends, strengths, and areas of controversy in the preparation of effective park and recreation workers—both through formal education and on-the-job training. You'll gain practical tips on locating and landing jobs within the national, state, local, and private sectors.

You'll share the satisfactions and challenges of working in both urban and rural areas . . . the frustrations and rewards of reaching out to "high-risk" youth, to disabled individuals, and to a general public increasingly pressured by modern living. You'll glimpse what it's like to manage land for multiple uses, interpret natural areas, adaptively restore historic structures. And you'll see how upward mobility is gaining impact and how innovative programs are recruiting more minority workers into the park and recreation field today.

As you meet the following colleagues in our field, see what they're doing, and learn what they're thinking, we hope you will feel a sense of proud kinship with them and an increased commitment to our dynamic, growing park and recreation profession.

by Maureen Palmedo

Confessions of a Country Mouse

by Ellen Ruth Reiss

I was a city girl, born in Manhattan and raised in the Westchester suburbs. I knew a good deal more about shopping for bargains at Bloomingdales, Broadway musicals, and delicatessens than I did about trees, baking bread, and shoveling snow. I majored in English Constitutional History and never visited my school's exceptional arboretum. Summer employment consisted primarily of receptionist jobs in Park Avenue advertising agencies and administrative work for political candidates. Despite eight years of summer camp in Maine's backwoods and repeated trips to my family's fishing camp in upstate New York, it never really occurred to me that people actually lived in places like Lewiston and Saranac. Had anyone suggested that I would spend 17 years of my adult life someplace other than Boston or New York City, I would have been incredulous, and perhaps a bit insulted.

With this decisively urban orientation, it was improbable and faintly ludicrous that June, 1963 would find me packing my black cocktail dresses, gourmet cookbooks, and subscription to the *New Yorker* in order to move to a ramshackle farmhouse in Dover, Vermont, a town of 500 with one general store, one church, one Town Hall, and three ski areas. Electrification had been completed in Dover a scant eight years before; the one major road in town had yet to be totally paved. My mother sent care packages consisting of heavy wool blankets and back copies of the Sunday *New York Times;* she dubbed our rural hamlet "Tobacco Road" and took private bets that we would be back in the safety of suburbia before snowfall, which occurs shortly after Labor Day in that part of the world.

My most skeptical friends all came to visit, and wield paint brushes, that first summer; there was a lot of murmuring about "cultural deprivation" and someone solicitously asked if I didn't miss the opera. For six months, I would bar the door at night against the full-mooned silence and eerie creak of the weathervane atop the church as well as unfounded terrors about roving highwaymen and marauding bears. A week after I'd arrived

in town, I received a postcard, expressly delivered by the rural mailcarrier, inviting me to "make a jellied salad for the Ladies Aid supper," Dover's major social institution, if you didn't count the male-only poker nights at the volunteer fire department. I also learned about primitive septic systems, ancient fuse boxes, rhubarb, harvests, Northeasterlies and three-day power-outages, Mud Season, tourists, and Town Meeting Day.

It is said that it takes 18 years for a down-country emigrant to be considered "permanent summer folk" by a Vermonter. I almost made it. My son, however, is legitimately native born. Nevertheless, as Benson Fuller, a part-time farmer and full-time raconteur who lived down the road from us put it: "Just 'cause a cat has kittens in an oven, don't make 'em biscuits."

Going into the Country

In 1980, 40 percent of Americans will be living in non-metropolitan areas. These rural areas are, for the most part, growing at a rate two or three times that of major cities. Rural occupations also are shifting. Only three people in ten are employed in agriculture or agriculture-related business; the principal growth has occurred in service industries, both governmental and nongovernmental.

The social significance of this much-publicized demographic trend concerns impact. Booming populations, in absolute and proportionate terms, require the conversion of land for new development, the reallocation of services and resources, and the creation of new jobs. Frequently this growth pressure also results in the displacement of the traditional workforce, increased demands for energy, and a confrontation between the expectations of newcomers and the attitudes of the indigenous population. While the Census may define non-metropolitan as any settlement area below 50,000 people, much of the rural in-migration has been taking place in towns smaller than 10,000, some even smaller than 1,500. In places of this size, there is an innate "quality of life"—of size, scale, and pace, of traditional values, and informal systems—that is more than regional color, cute anecdotes, postcard pictures, and quaint customs. The subtle and historic relationship between resident and rural community is easily disbalanced and overwhelmed. Insensitive and uncontrolled resource exploitation and development have long been part of "the American way," but the opening of the Interstate Highway system, the spread of telecommunications, and the economic abundance of the 1960s, coupled with the deterioration of inner-city life, intensified an unprecedented rush to the countryside and the small town.

While I hardly knew it at the time, moving to Vermont in the early 1960s was the trendy thing to do; the vanguard of a "back-to-the-land movement" which was occurring in New England, the Ozarks, the Sunbelt, the Pacific Northwest, the Rockies, the Pueblo, and the Upper Peninsula. Of all those curious friends who came to visit that first summer, two-thirds now live in the country. So do movie stars, famous economists and journalists, Soviet dissidents, artists, writers, and powerful politicians. A distinction should be made between visiting and residing; the phenomenon is not one of tourism, country homes, and ski chalets but rather of settling in.

In Vermont, where once it was hard to come by a cup of coffee in a public restaurant after 9 p.m., a drink on Sunday, or a hot pastrami sandwich—ever, it now is possible to enjoy two good symphony orchestras, roller disco, a touring opera company of resident performers, foreign-language films, home-baked bagels, indoor tennis, computer dating services, and Vermont-based educational television and public radio. As a microcosm of societal change in the rest of the country, Vermont also has condominium, shopping mall, and strip development, air pollution, urban decay and crime, X-rated bookstores, and many more people than cows.

Throughout this decade of transition, Vermonters became self-consciously aware of the state's transformation from insular rural society to extended urban megalopolis, from agricultural economy to tourist mecca and then to sophisticated partners in a technology-dependent regional consortium. Along the way, some of the state's innocence and identity were lost; the state acquired a professional cadre of bureaucrats, a set of nationally-known environmental laws, and over 150,000 new residents who now call themselves "Vermonters."

Ellen works on a soil survey during the Dover-Wilmington Ecological Planning Study of 1971.

To facilitate traveling around the state, Ellen learned to fly a plane.

Riding a snowmobile was part of Ellen's public relations and recreation learning process.

Coming of Age

My own professional evolution closely parallels the larger transitions experienced by Vermont as a whole during this period. In Dover, my first years were spent catering to ski guests, baking bread, painting watercolors, and passionately rejecting the trappings of my urban culture and origins. During the next "community involvement" phase, I discovered the profit of real estate sales, the joys of nightly meetings of the newly-formed local planning commission, and the frustration of populist state politics. In less than eight years, Dover had a million dollar experimental elementary school, a fancy spray-irrigated central wastewater treatment facility, a multi-tiered landfill, a town manager, 42 major subdivision developments, a town plan prepared by an internationally renowned ecologist, an airport, an 18-hole golf course, traffic jams, and a resident psychologist. Of 15 working farms, only two remained and the Ladies Aid had dwindled to a handful of members. I chronicled most of it in three weekly papers which were produced in a back room behind my real estate office.

After working as a volunteer for the town and the Regional Planning Commission, I ended up as a paid lobbyist and planner for the Commission during the two heady years when southern Vermont's growing pains were perceived as the wave of a troublesome future for other remote areas of the state. I bought a brief case, took flying lessons, entertained in an evening skirt, put 1,000 miles (1,600 km) a week on my car, attended hymnology courses at the nearby college, was part of Vermont's delegation at the Democratic National Convention, and got divorced. Coincidentally, I made more money selling real estate in 1969 than I made any subsequent year in government, or even today in Washington.

Ambitious environmentalists followed the flow of the state's development from south to north. We thought we were chasing the uncomplicated life but it managed to recede before us because quality of life cannot be preserved by regulation. My first stint in state government was as the Housing Specialist for the newly organized Agency of Housing and Community Affairs. Vermont still had the lowest per capita income in New England; ¼ of the population lived in "inadequate" housing stock, according to *Farmers Home* and the 1970 Census, and we had just discovered public housing financing.

I then was hired as a consultant to the Agency of Environmental Conservation to prepare the Statewide Comprehensive Outdoor Recreation Plan, the basic eligibility document for Land and Water Conservation Funding. I worked as the Agency's Recreation and Resources Planner for 8 years. I lived in Montpelier, the state capital, population 10,000 and growing: a picturesque small town of Federalist and Victorian architecture built in the Winooski River's flood plain, historically a manufacturing and commerce center, now dominated by the legislative and executive branches of government. Five minutes out of Montpelier in any direction but the commercial-strip road, the pastoral landscape prevails, dotted with new ranch houses and trailers. Thirty minutes away are the resort complexes of Stowe and Sugarbush; 40 minutes away are Hanover (Dartmouth)-White River and Burlington-Lake Champlain, Vermont's version of "the Big City" with a large State University, a waterfront, urban renewal, imported culture, a department store, boutiques, and a nightlife.

Montpelier is a place where people listen to band concerts on the State House lawn, where the daily newspaper is 20 pages long, where everybody compares zucchini and the efficiency of their wood stoves, where most people know the Governor and the State Senators on a first name basis, where people bicycle and sometimes cross-country ski to work, where deer feed on the apple trees in the parking lot outside the building in which I worked. In 1976, passenger rail service returned to Montpelier; the train whistle sounding through the Green Mountain passes on the twice-daily trips was

All photographs courtesy of Ellen Reiss.

Cross-country skiing is one of the many recreational activities of rural Vermont.

Ellen Reiss cooks lunch for the Lake Champlain Trust's annual meeting.

reminiscent of "Our Town." During the four months a year the Legislature is in session, politics dominates the news; otherwise it's the Little League scores. Church and cultural-civic activities are so frequent and absorbing that hardly anybody has a night free. People are known by their recreational pastimes more than their professions. I owned more pairs of running shoes than high-heels, wore hiking boots and thermal underwear in the office, sang in a Baroque ensemble, acted in a community theater group, taught management and recreation planning courses, bagged dried apples in the Food Co-op, played Friday night volleyball, and every time I left the state to attend conferences, felt overjoyed to come home again.

Community activities play a major role in rural life. Here, Ellen performs with the Plainfield Little Theatre.

State Service

The Agency of Environmental Conservation, organized in 1970 to administer Vermont's bold new legislation and manage the state's incredible natural resources (43 State Parks, 85 wildlife management areas) and several major federal grant programs, employs approximately 400 full-time people (600 in the summer months). Only 125 work in the central office in Montpelier; the remainder are attached to 5 District Offices in various parts of the state. Professional women are an uncommon phenomenon; career advancement is very slow. In Vermont, where there is one of everything but very little wasteful duplication, secure jobs are hard to get and rarely relinquished. Partially this is because they are unusually satisfying, filled with variety, personal contact that is generally unknown in government, opportunities to be creative and inventive, and the feeling that an individual decision does make a difference.

During my eight years with the Agency, reporting to the Director of Planning and serving as staff to the Secretary, I had a chance to become familiar with nearly every aspect of environmental management and public administration. I produced reports, wrote contracts, hired and supervised a staff that included professionals, interns, and volunteers, analyzed legislation and specific environmental developments, conducted public hearings and workshops, appeared on television, developed an ADP system for recreation inventory, went on field investigations, represented the state at conferences, prepared budgets, and acted as a conduit of information between units of local, state, and federal government.

There were periods of tedium and inertia, but the work was never boring or isolated. Our recreation planning budget was approximately $75,000 annually; my salary was a fraction of that but the benefits, while not lavish, were solid. The work day was 7:45 to 4:30, frequently longer; flex-time was instituted several months before I left. Our workplace was a standard government office building but most of us had a private office space and excellent secretarial support. Among the topics covered by our planning studies during this period were vacation homes, natural areas, scenic rivers, landowner liability, public land acquisition, recreational demand, wetlands preservation, environmental education, the Appalachian Trail, bicycle routes, surface water zoning, multiple use of public capital investments such as central sewage facilities, community recreation planning assistance, and Land and Water Conservation Fund expenditures. Lacking either abundant financial or staff resources, we became, of necessity, inventive and selective. Priorities were carefully selected with the widest amount of inter-agency and citizen participation possible.

Many Vermonters take their state's environment personally and since there is not a fat layer of bureaucracy to hide behind, accountability is more than a fashionable word. The level of professionalism in the Agency, and, in fact, in most of Vermont government is remarkable. While salaries were, generally, not equal to those in the private sector, the concept that public service is an affirmative responsibility was shared and realized among many of my co-workers. In many respects we felt, and in fact were, extremely privileged; public service was an extension of beliefs and values, of a sense of place, stewardship, and continuity. Some of the unconventional jobs—park naturalist, state archeologist, Act 250 district coordinator—gave employees an unusual opportunity to explore new program models. Even as the State Resources Planners, my one co-

worker and I frequently operated more by intuition, common sense, and trial and error than by standard formulas and established procedures. Before 1970, our jobs simply had not existed.

Among other things, our small staff was supportive of one another—personally and professionally. Many of us socialized and recreated together the way residents of small communities often do. We shared a very real sense that we were all in it together; from Bennington to Derby Line the state was a community. The chief executive officer and top administrators generally were accessible; incompetence was too visible to be dismissed as "good enough for government work."

The hardest trick was getting into the system from the outside, not thriving once you had arrived. Vermont is very conscious of the incremental expansion of government; a knee-jerk reaction to the bait of federal program funds. The commitment to hire new staff, undertake new programs, and augment the existing bureaucracy often is contested hotly by both legislators and administrators. There is a general feeling that a small state cannot do everything and do it well. This ingrained conservatism has meant that some environmental issues remain dormant.

In recent years, the litmus test has been practicality and the existence of public support, not sensationalism or advocacy. In the early 1970s there was a fervor to save the world by saving Vermont. The sobering impact of recession, energy crisis, fiscal austerity, and the legislative rejection of certain environmental proposals such as the State Land Use Plan has resulted in a less swashbuckling approach to public administration. The impatient and the restless have moved on, but the process of government consists precisely of the slow, inexorable, and deliberate movement of cumulative decisions. I remain convinced that as long as there are small but tangible accomplishments, employees neither burn out nor dry up.

Fulfillment

At a recent lecture I attended, somebody from the federal Office of Personnel Management made the point that being able to deliver a service or produce a product was a little less rewarding than being a "performer"—a person who was intimately involved in the entire operation, from conceptualization and planning through implementation. Rural employment provides a very unique opportunity to experience the totality of a job or an assignment. In park, recreation, and natural resource professions, the existing infrastructure precludes the luxurious extremes of specialization.

The compensation for low pay and long hours is the reality of personal involvement. In addition there is something tremendously gratifying about maintaining an intimate connection between your natural surroundings and the daily activities of your chosen career: it is almost impossible to erect artificial barriers between the substance of your work and where you live. When forests become the place where you cut your firewood, the place where you hike on weekends, the place you can see from your open window, and not merely map plats or board feet; when rivers are the places where you swim and fish as opposed to abstract concepts titled "Wild and Scenic" or "Class A and B," then the context of work is personal and immediate.

Rural employment includes sacrifice and inconvenience as part of the territory. Entertainment must be self-initiated; anonymity is hard to find; and everyone curses the morning when it's 25 below and the car won't start and the pipes all burst and you still are expected at your desk. But it has been said that Vermont, and other compact societies, endow us with a chance to master the many facets of small systems, to experiment, and to grow. These lessons are not only transferable, they are challenging in and of themselves.

As rural populations expand, new career opportunities—in recreation leadership, in park planning, in environmental management—also will increase. Rural employment is a kind of synergy: as you contribute your skill and knowledge, the community itself is shaping and molding you. I never could have anticipated the strange and beautiful gifts that Vermont gave me for 17 years, for there is no way to recapture the intensity of that experience.

Epilogue

I now live in the heart of Washington, DC. I work for the federal Heritage Conservation and Recreation Service and I wear suits and lipstick and eat lunch at fancy restaurants. I am conducting an assessment of rural area and small community recreation, sitting behind a desk in a crowded building connected to the rest of the city by efficient public transportation, connected to the rest of the country by telephone. The irony has not been lost on me.

Washington is an elegant, cosmopolitan place, filled with delights unimaginable in Vermont—Vietnamese restaurants, cherry blossoms, and the Smithsonian. The morning paper has proven intimidating; I can't get used to push-button phones and answering machines and I have to remind myself to lock the door and the car and the security system, which is hard because I had forgotten what keys were all about.

There are over 100 expatriate Vermonters here, many of them working in rural development programs. We constitute an informal network of old friends. In comparing notes, we've discovered that we all came for similar reasons—to obtain professional challenges and exposure unavailable in Vermont. By and large, we are successful, busy, and adaptable; we look and talk like Washingtonians.

But for some peculiar, probably symbolic reason, there is a rooster living in the alleyway behind my apartment. And often, at night, when I hear him crowing at the streetlight, I understand that home is where the heart is.

Ellen Ruth Reiss was educated at Connecticut College and Marlboro College, Vermont. She was formerly the Recreation and Resources Planner for the Vermont Agency of Environmental Conservation and is currently conducting the HCRS Assessment of Rural Areas and Small Community Recreation. She still serves on the Board of Directors of the Green Mountain Club and the Lake Champlain Islands Trust. She has contributed numerous articles to newspapers and publications and has been a guest lecturer in recreation planning and management at colleges and conferences in New England.

Gateway Boosts Urban Career Opportunities

by Herbert S. Cables, Jr.

In the spring of 1967, then Secretary of the Interior Stewart Udall noted in *Look* magazine that "with seven out of ten Americans clustered in machinemade urban areas, we desperately need nature's great benefits. After all, man's part of nature can be a ste[illegible]ing gyroscope in a person's as well as a nation's, life." Just one year after these comments appeared in print, the national urban park concept was initiated by the National Park Service.

Today, national urban recreation areas have become an integral part of the park and recreation scene. In fact, Gateway National Recreation Area, in New York and New Jersey, attracts approximately 5 million more visitors per year than Yosemite and Yellowstone combined. Furthermore, Gateway's annual number of visitors, 9.1 million, exceeds the total number of visitors at two entire Park Service regions and equals that of a third.

National parks, according to Dr. Joseph Sax, professor of law at the University of Michigan, once were considered a luxury that the nation could comfortably afford. In the early days, national parks were merely a symbol to most people; the majority never expected to see one.

Today, because of changing lifestyles and more leisure time, urban Americans are demanding greater recreational, educational, and cultural opportunities within reach economically and accessible geographically. In response, the National Park Service and other park and recreation agencies are striving to develop new and appropriate programs to meet the needs of urban populations.

At Gateway, U.S. Park Police serve as protectors and public relations officers. Gateway NRA

Myriad of Job Opportunities in Urban Areas

One positive result of this urban thrust has been increased job opportunities for career-oriented park and recreation workers. Jobs in urban areas offer good potential for upward mobility, the chance to grow, to gain valuable experiences, and to utilize some traditional park and recreation skills while adapting others to function effectively in an exciting new setting. At the same time, the ethnic mix, larger numbers of visitors, and the need to translate traditional park programming and thinking to the urban environment have presented additional work challenges.

Let us look at some of these challenges as presented at Gateway.

Gateway was established by the Congress in 1972 as the pilot urban recreational program within the National Park Service. Gateway's four units in New York and New Jersey provide opportunities for law enforcement personnel, park technicians, environmental education specialists, interpreters, community relations staff, engineers and planners, as well as administrative personnel.

Scope and Diversity of Urban Recreation Areas Test One's Abilities

What specifically can the urban experience do for these specialists? The scope and diversity of urban recreation areas definitely test an individual's abilities and bring one that exhilaration that comes with meeting challenge head-on.

Statistically, Gateway is second only to Yosemite in search and rescue operations. In 1977, Gateway reported and fought more fires than any other unit within the Park Service. Its United States Park Police and park rangers handled more crimes than any other unit of the North Atlantic Region, more than all other Park Service

Many urban youngsters get their first sailing instruction and experience at Gateway.

Gateway NRA

Safety, maintenance, and interpretive personnel all do their part to enable youngsters to fish in Jamaica Bay.

units except for Golden Gate and the National Capital Region. Gateway has the only self-contained wildlife refuge in the Park Service, a 9,000-acre (3,600 ha) tract of fresh water impoundments, marshes, hassocks, and open sea water.

Gateway's headquarters at Floyd Bennett Field houses two huge geodesic domes, solar-heated greenhouses which enable school children and senior citizens to grow vegetables year-round. The greenhouse project was developed by Gateway staff in cooperation with biologists from Fordham University.

Gateway sponsors athletic events and sports clinics. Because New York is considered by many to be the sports capital of the world, Gateway is able to attract players from the National Basketball Association, the Professional Golfers' Association, and even Althea Gibson, former Wimbledon tennis champion.

In celebration of the United Nations' International Year of the Child in 1979, Gateway directed its emphasis toward providing unique experiences for young people. These included education on the value of man's food cycle, through use of geodesic domes and community gardens, and Ecology Village, two-day camping experiences which attracted 1,300 young people last year.

There are crafts programs, nature discovery walks, ethnic music and puppet shows, historical tours and environmentally based arts and crafts activities, cultural festivals which attract several thousand on a weekend, and other programs. All of these demand proficient staff.

Gateway's programs are attempting—and succeeding—in bringing together the people of diverse ethnic, racial, and national backgrounds that make up the metropolitan area. The recreation area also reaches out to the city's people indirectly through such ventures as the programs sponsored in cooperation with the New York City Board of Education. These programs provide teachers in the system with credit courses on environmental, marine, and biological subjects; they also better equip the teachers to help their pupils. Similarly, Gateway works on community career opportunity activities and with such universities as Rutgers, Fordham, Cornell, and the Yale School of Forestry.

To undertake this vast and vital mission, Gateway has a budget that exceeds $8.4 million and a full-time staff of 120 men and women.

Employee Living in an Urban Area

What does the urban environment offer personally to the park and recreation worker and his or her family? To those who have never been to New York or San Francisco, these cities may seem to be merely a gigantic Times Square or endless trolley ride to Fisherman's Wharf. However, New York, San Francisco, and other national recreation area sites in major metropolises provide outstanding mixes of big city advantages with small town living.

Gateway's employees live in many suburban communities in New York, New Jersey, and Connecticut, all within easy commuting distance. They are only about an hour or less away from outstanding Manhattan restaurants, fine shopping, major league sports, concerts, theatres, museums, entertainment, and international tourist attractions that are easily accessible any evening or weekend by train, bus, or with less than a half-tank of gas. It is good to know that during a stint at an urban recreation area, one can enjoy the sites and sounds that millions of Americans can only dream of experiencing.

Gateway NRA

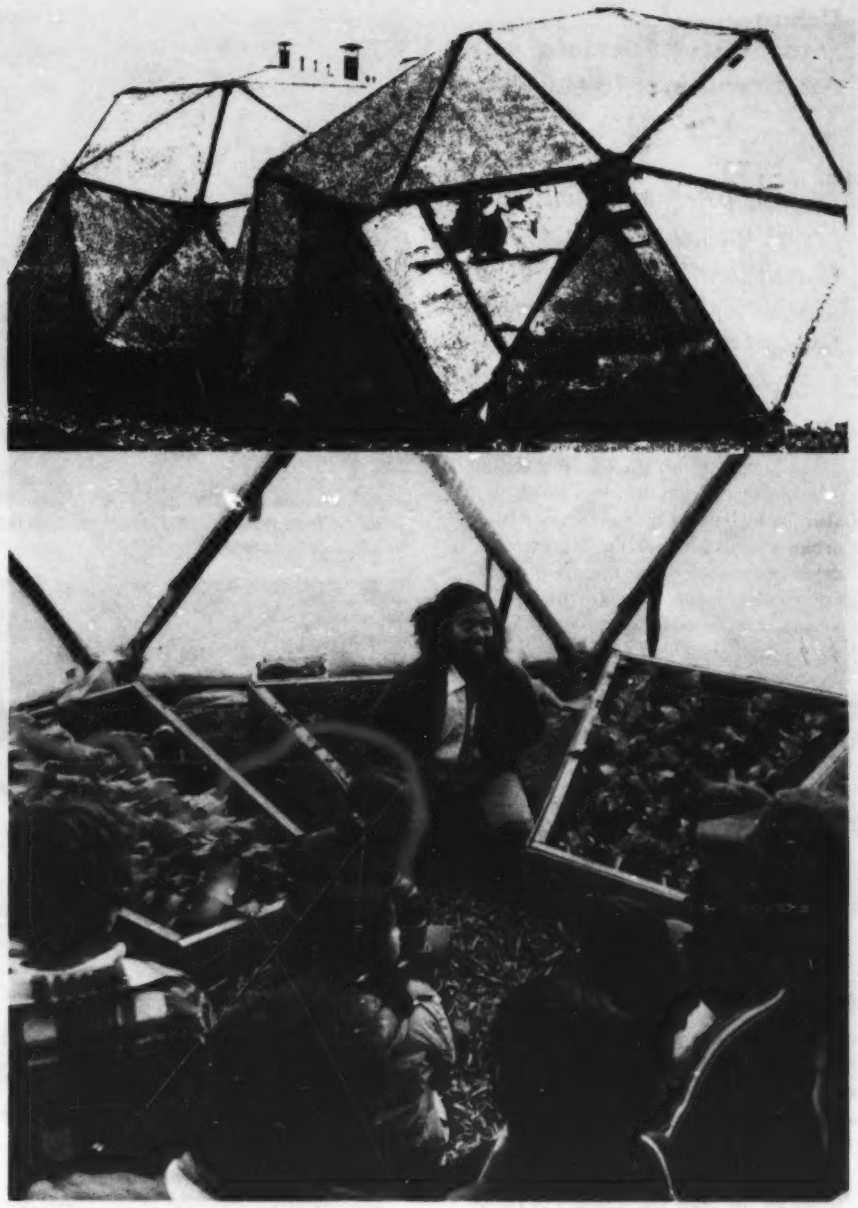
Park personnel in urban areas also benefit from close proximity to a wide range of colleges, universities, and specialized schools where they may earn degrees, take credit courses, or just sharpen their skills in a foreign language, music, art, fashion design, drafting, or a myriad of other subjects. This education surely comes in handy long after one leaves the urban environment.

This is not to say that major cities are for everyone. They are not. One must weigh all the factors carefully before making a commitment to an urban work environment.

First, one must love people—millions of them to be exact. And one's spouse must be willing to make the change to what for many may be a totally new way of life.

At a time when urban recreation areas are growing in numbers and in usage, the opportunities are immeasurable for employees who are willing and capable of meeting new types of work demands and challenges.

The challenges are many. But so are the rewards and the satisfaction for the men and women who are willing to develop personally and professionally while adapting traditional experiences and skills into worthwhile programs from which urban Americans and the nation can benefit.



Two geodesic domes house solar-heated greenhouses. This project was developed by Gateway staff in cooperation with biologists from Fordham University. Inside the greenhouses, school children and senior citizens can grow vegetables year-round.

Gateway NRA

Herbert S. Cables, Jr. is Superintendent of Gateway National Recreation Area, New York and New Jersey.

Urban Interpretive Services: An Investment in the Future

by Steven Kahn

"Ask me to help and I will, until I work myself to death if I have to, but don't ask me about my dreams for this city because the longer I live here, the less I find here for me."

The above quote, taken from the journal of a high school student, reflects not only the frustration of urban youth, but also the feelings of many citizens living in urban areas. Faced with unemployment, deteriorating neighborhoods, and rising crime rates, people have serious reasons to question the quality of their environment and to ask what government agencies are doing to help solve the problem. Many people want to become involved in improving their neighborhoods and their cities, but often their paths are blocked, their efforts thwarted.

In 1976, the State of California Department of Parks and Recreation initiated a bold new project providing strong interpretive programming oriented to urban community needs. Initially, the project addressed problems faced by urban youth. It promoted career exploration and provided a new means of recruiting and preparing urban youth for state, regional, and local park jobs. It reached out through young people and their peers to promote park-related community involvement.

The project core, the Environmental Career Opportunities Class, was cosponsored by the State Department of Parks and Recreation and the Pittsburg Unified School District in Pittsburg, California. The Department of Parks and Recreation contributed a program coordinator, study sites, resource personnel, and provided seasonal employment for students completing the class. The school district provided a teacher, a classroom, and necessary materials and supplies.

Students from the class are trained to act as interpreters. Later, they will utilize these techniques when placed in seasonal positions.

Training in first aid and CPR is an integral part of the class. CA Dept. of Parks & Recreation

Students Learn by Doing

Offered to juniors and seniors at Pittsburg High School, the class stressed a hands-on approach to park employment through vocational training, environmental education, and projects of service to the community. Skill training covered interpretation, public contact, routine maintenance, fire suppression, and first aid. Job hunting skills, interpersonal relations, and the ability to live away from home also were stressed. Students acted as counselors at the school district's environmental education camp. They presented many interpretive programs for elementary school children and led interpretive tours in nearby parks.

Students also completed significant community service projects. They designed and built a nature trail in a local botanic garden. They wrote and illustrated a guidebook to the trail. They worked with senior citizens and other members of the community. Students also organized a successful water conservation conference which was attended by state and local officials and representatives from the private sector.

A concept central to the project was the total involvement of and commitment to the students. They were approached on their own terms and encouraged to participate in the program design and development. As a result of their good work, students received positive recognition throughout the community.

Students engage in field studies prior to leading interpretive tours for others from their community. John Nightengale

The pilot program proved highly successful. Teachers and counselors noted a marked improvement in the overall academic achievement and maturity of students who had taken the class and found work in state parks. The park system also benefited through the placement of trained, enthusiastic young men and women in seasonal positions which provided solid experience for full-time employment. Seasonal attrition rates for students from the class were lower than normal and relatively few problems were encountered once students were placed in the field. Several students received certificates of commendation for assistance rendered during emergency situations.

Scope of the Project Expands

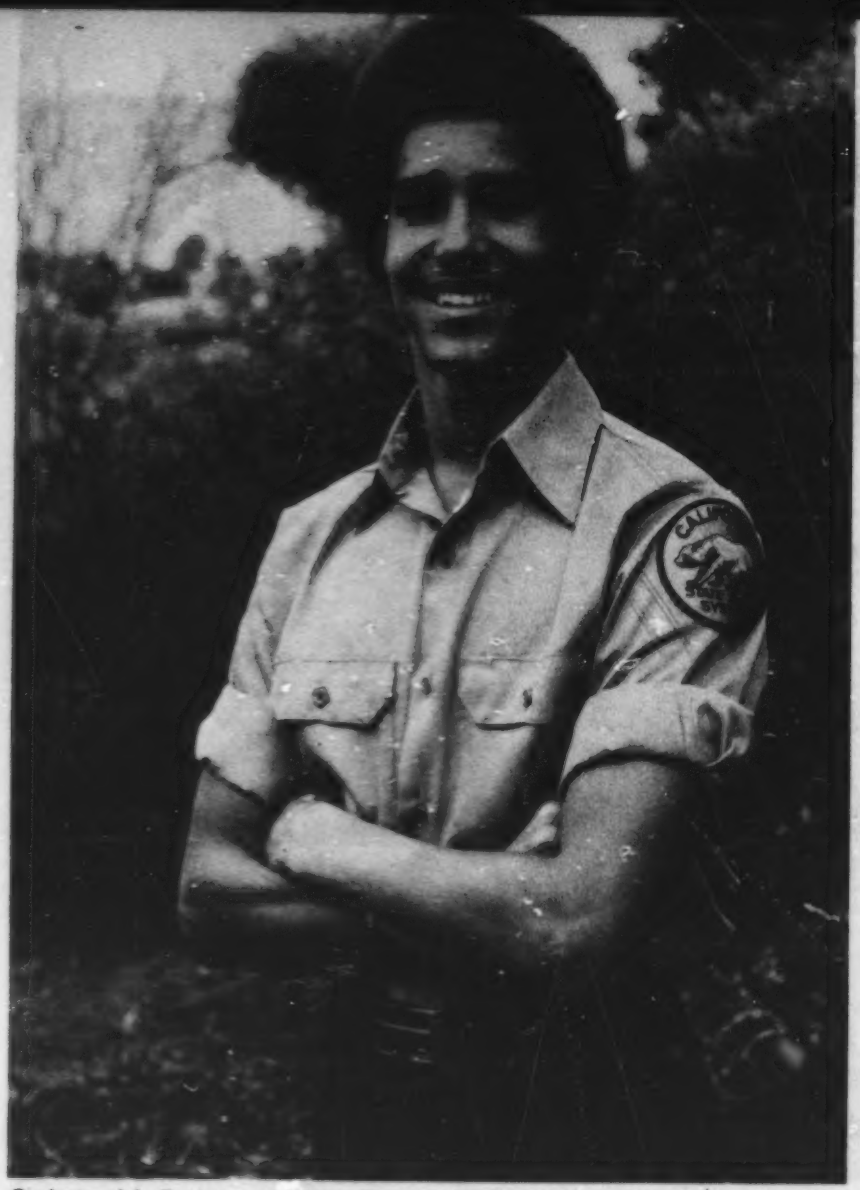
Within two years, the pilot project was expanded to the community college level in Oakland. Project personnel were incorporated in a formal working section. Offices were opened in San Francisco, San Jose, and Los Angeles.

Program personnel lived in the areas they served, providing a direct, visible link with the State Department of Parks and Recreation. Their geographical and outreach activities intensified. They worked not only with students but with local agencies and community groups including senior citizens, volunteer organizations, and groups dedicated to the training and employment of disabled individuals.

Specific Accomplishments

By January, 1980, in its semiannual Report to the Director, the Urban Services Section was able to list the following accomplishments:

- More than 100 students from urban areas had been placed in seasonal park employment since the beginning of the project. More than 60 percent of those placed were ethnic minorities and more than 50 percent were women.
- An informal evaluation of students completing the Pittsburg class showed that 80 percent either continued their education at the college level or were gainfully employed following graduation.



Graduates of the Environmental Career Opportunities class are placed in seasonal positions with the California Department of Parks & Recreation. John Nightengale

- The Pittsburg Public Services Department had found the program of benefit to its operations and was adopting a similar model at the local level.
- The Urban Services Section had helped design and implement an award-winning career education program linking disabled youth with city and state parks. The program used parks as resource sites for training and development while creating supplementary support for park operations.
- Through the promotion of special programs and implementation of interagency cooperation at state and local levels, the Urban Services Section generated in-kind contributions equaling 60 percent of all section salaries in the 1979 fiscal year; the section projected a similar figure for the 1980 fiscal year.

Personnel from the section currently are generating a wide variety of activities in many urban communities. They form a special team. Highly mobile, working on a cost-effective basis, they are able to respond immediately to many requests for assistance from diverse groups. Although a small section, Urban Services has produced significant results in meeting the environmental needs of many urban communities and has opened a window on the California State Park System.

Parks, Recreation, and the People All Benefit

In meeting environmentally oriented needs, the Urban Services Section produces verifiable results. The State Department of Parks and Recreation benefits through the hiring of competitive candidates. The community benefits from specific projects and the networking of educational institutions, community organizations, and state agencies. The young people involved in the program receive employment, counseling, and gain an increased sense of direction in their lives. Recently, the Urban Services Section received a letter from a young man who had taken the Environmental Career Opportunities Class and found employment with the Young Adult Conservation Corps.

> *Dear Friends,*
> *Thanks for all that you have done for me over these couple of years. You have changed my life I think, because all I did was drive around and get drunk until I got into this class. I liked it because it helped me realize how I was going to end up. Now I have changed. I like my job. It's great and I'm going to college in March at night. I'm taking a forestry class so I can try to get into the Bureau of Land Management when this year is up. So all I can say is thanks to you all.*

The vast majority of young people in the program are seeking positive involvement with their society. Many have benefited through the program. Many have also realized the intrinsic value of parks and have become friends of the park and recreation movement. These young people will take an active, constructive part in contributing to the future.

Steven Kahn is a Park and Recreation Specialist with the State of California Department of Parks and Recreation. He currently coordinates statewide activities for the Urban Services Section and has worked in field operations as a State Park Ranger Intermittent and as a Seasonal Aid.

Upward Mobility

by Dorothy Benton

Editor's note. Dorothy (Dottie) Benton is an International Cooperation Specialist in the National Park Service. The steps in her career development, plus the fact that she is a black woman, combine to make her an example of upward mobility at work in the park and recreation field.

By sharing some of her personal experiences and offering some advice on upward mobility tools and strategies that she has found helpful, Dottie hopes to encourage others to follow in her footsteps.

Dottie Benton, coordinator for the College of African Wildlife Management, safaris through Tanzania by Landrover.

NPS

It has been said that self-experience is the best there is. Myth or not, this adage goes a long way when climbing the career ladder.

I started as a GS-2 Clerk-Typist at the U.S. Treasury Department after a semester of evening typing classes. Informal talks with co-workers who were approaching retirement and still GS-4 Clerks soon convinced me that I was in a dead-end position. Determined that my eight hours on the job would not only be challenging, but rewarding, I sought change by applying for a GS-3 position at the Department of Agriculture which offered promotion potential to GS-4.

This agency appeared to have better opportunities for advancement. However, those opportunities did not open up for me or for other professionals in higher ranks as fast as we thought they would.

When one of the professionals accepted a position with another agency, he remembered my work and offered me a promotion in the new agency. Then, when officials in the Agriculture Department learned I had accepted another job, they offered me the same grade to stay with them. That let me know that good work pays dividends.

At that point, I felt it was advantageous to remain with Agriculture. I was working in the Office of Information and had to type press releases. I used this as an opportunity to learn more about the purpose and format of press releases and to develop some basic writing skills.

Communication skills, I soon discovered, were an asset, indeed a key tool, in career development. Acting upon this realization, I began attending the Department's Graduate School which offered writing courses tailored to government careers.

Since I still had not decided upon a career agency, I began to learn as much as I could about the responsibilities of each government agency in Washington. I had two motives—to do something interesting and to help people at the same time. After researching various agencies, I decided to make a lateral move to the National Park Service, which has responsibility for our national heritage.

My new GS-4 Clerk-Typist position involved typing personnel actions; this triggered a new goal—that of working in a personnel office.

I needed additional skills to move up from the typist rank. So I learned shorthand and was selected for a stenographer position immediately because of a severe shortage of qualified applicants. This experience qualified me to apply for secretarial positions.

However, at that point, the Department of the Interior announced an Equal Opportunity Training Program whose primary purpose was to provide minority group employees who had demonstrated potential and motivation for development with the chance to acquire appropriate training and job experience. Here was the opportunity I needed to gain additional experience through rotating on-the-job assignments, further academic training, individual counseling, and help in formulating an individual development plan. Encouraged by my supervisors, I applied and was accepted into the program.

Following the program, I competed for and obtained a secretarial job in the personnel office. I took advantage of this on-the-job learning opportunity and supplemented it with formal evening courses in personnel administration. Eager to advance, I worked hard, tried to do a good job at all times, and utilized my mistakes as stepping stones.

Convinced I could assume additional responsibilities, I applied and was accepted for the position of Staff Assistant to the Personnel Officer. There I developed many contacts with field personnel and soon realized that the heart of NPS operations lies in the field serving visitors.

Oxon Run Overnight Camp—one of Dottie's earlier responsibilities. NPS

◀ *Programs at Oxon Hill Children's Farm were part of Dottie's responsibilities as Chief of Interpretation, Recreation, and Resource Management for National Capital Parks East.* NPS

I began to take training courses in various subjects that ultimately would prepare me for an assignment at the park level. In time I applied for and obtained the position of Community Relations Coordinator in a park. There I had to keep abreast of NPS policy and activities and to share that knowledge with the park constituents.

Then came the big opportunity. After learning the basics of park operations, I applied for a position in management and was accepted. There were many challenges to test the limited administrative and supervisory experience I had gained. I constantly sought training opportunities to strengthen the areas in which I felt weak. And I counseled frequently with others, including supervisors and my own employees.

Constructive criticism from those whom you supervise can provide the best kind of self-development, for they see you as others see you. I feel it is crucial to develop a rapport with your employees that can allow for constructive criticism, yet still maintain the necessary respect due a manager.

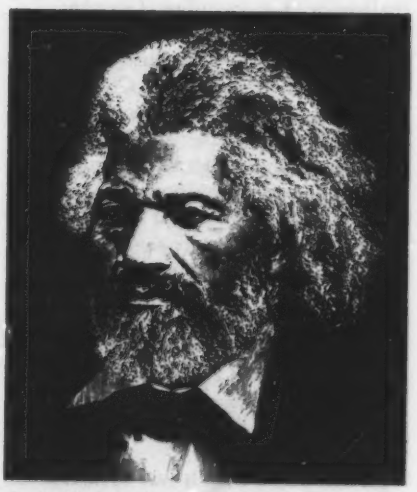
There still were gaps in my experience and skills that needed sharpening. So I applied for the Departmental Manager Development Program and was accepted. During that 10-month program, I received additional administrative experience that qualified me for more responsible management appointments. The happy ending to this stage of my career came with my appointment as Program Manager, International Cooperation Specialist, for a pilot technical training assistance program in Moshi, Tanzania.

There are a number of tools and strategies that I have found useful as I have climbed the career ladder. Likewise, there are some trade-offs and obstacles one can expect to encounter.

Goal Setting

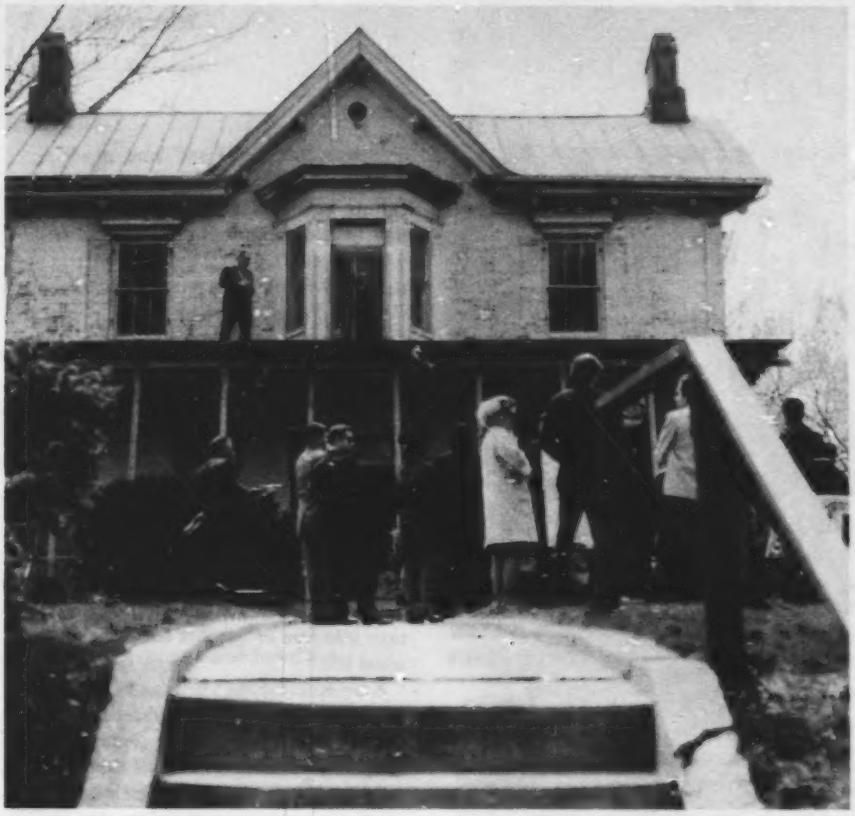
Often we find ourselves struggling in an era when many of our colleagues seem to be moving ahead with ease. At these moments we need to assess our own skills and values. We need to determine what it is that we hope to achieve; what it will take to satisfy our own ego and needs as a person.

Any action from which we expect serious accomplishment requires the setting of goals . . . goals that are measurable and reasonably achievable within a given time frame. Setting reasonable and attainable career goals must be a high priority of any person who expects to get ahead.



Frederick Douglass was a strong role model for Dottie. NPS

How do you begin? First, you should focus on where you want to go and what avenues you must travel to get there. This requires a realistic appraisal of your own skills and of those necessary to perform the jobs you consider desirable. Once you



Dottie gives a Living History demonstration at Oxon Hill Farm (MD). NPS

◀ *Giving a tour at the Frederick Douglass Home (MD).* NPS

have appraised your skills, seek out opportunities where you can put them to best use.

Goals should be established on two levels, short-range and long-range. For example, suppose you decide upon a career goal which you hope to attain within the next five years. You also should chart out all the positions you qualify for that can lead you step-by-step to that long-range goal.

A young girl in high school once desired to become a secretary to her Congressional representative in Washington, DC. For her high school term paper she chose the subject, "United States Government," which required her to research all three branches. Although she did not go directly from high school to that secretarial position on the Hill, she took the necessary first step of becoming a secretary. She took pride in being a secretary and proved to be an excellent one in a federal agency in Washington, DC. As a result of her outstanding job performance, when that agency received a request from the Hill to provide a person for a temporary, short-term detail, this young woman was selected. On this detail, her performance continued to excel and she was offered a full-time position.

Perhaps this young woman did not realize she had set a goal and worked logically to attain it. Often, when we think of goal setting, we think of long-term, hard-to-set, and unattainable goals when, in reality, we set short-term goals almost daily in our lives without knowing it.

Career ladders are connected closely to goal setting. Establishment of a career ladder is an important step for any person interested in upward mobility. It is nothing more than a road map which can be followed from one point to another. A career ladder should depict the various grade levels through which an individual must pass (short-term goals) to achieve a certain desired level (long-term goal). It also should identify the experience and training required at each rung.

Role Models

I firmly believe that mentors and role models are crucial to the career development of those who excel in any field. The good advisor not only counsels a person on what to do but serves as a sounding board for one's ideas and decisions.

A role model can be either a person or a track record left by someone. One of the most encouraging role models in my career has been Frederick Douglass, the late orator, spokesman, and fighter for human rights. After reading his biography I knew there was hope for me. Autobiographies of successful people can provide valuable inspiration.

Throughout my career I have tried to observe many different management styles, some good, some bad. In selecting role models, you shouldn't just look at people who always appear to be perfect. It's more useful to look at a mixture of what you consider good and bad examples. The bad ones can help you see clearly what you don't want to do while the good ones provide positive examples for you to follow.

Organizational Social Functions

Organizational social functions offer excellent opportunities for cultivating mentors and for generally advancing your career. Think of the wealth of advisory talent present at retirement gatherings, for example!

Many striving employees shy away from office social functions, feeling they are not in the so-called class to attend. This is counterproductive careerwise.

The extra effort you put forth to attend such a function lets supervisors know you are interested in the organization for reasons other than your paycheck. Office social gatherings also offer the time and opportunity to discuss your outside in-

Dottie has coordinated the Environmental Day Camp at Fort Dupont Park (MD). NPS

terests, activities, and talents with a wide range of colleagues on a relaxed and informal basis. In this way, you may discover that somewhere within your organization, a special talent you possess is being sought.

Trade-Offs

In conversations about careers, we often hear talk about trade-offs and how they are perceived by employees. Trade-off frequently means accepting fewer dollars for a short period of time to gain more dollars in the long run. This involves a certain amount of risk and undoubtedly requires some personal sacrificing. Yet trade-offs can be effective means to an end.

A young woman who had achieved her career goal as a secretary once asked my advice on a decision she was having difficulty in making. She had been offered a paraprofessional position at a lower grade. The position would require her to accept two grades' lower pay, but it was targeted for "upward mobility" potential. The young woman had grown accustomed to the living standard of her present salary. To accept the lower graded position would definitely infringe upon that standard.

My response was to ask her whether she would prefer to live and retire at her present standard or increase her living standard and retire at a much higher salary. Fortunately, this woman understood the concept and accepted my veiled advice. Today, she has far exceeded what she originally expected to accomplish in her career.

Trade-offs, therefore, are simple, logical steps which, taken at the right time, can pay big dividends careerwise.

Cultural Differences

Cultural differences cause many Americans to suffer physical and psychological isolation. Both minority and majority groups should make every effort to try to understand how each group is different and why.

When we are unaware of a cultural difference or cultural pattern, it often creates problems and frustrations. Tremendous distortions in meaning frequently occur as we try to communicate with people whose backgrounds differ from our own. Achieving true understanding and insight into the thoughts and feelings of people from different backgrounds is more difficult and more of a problem today than most of us care to admit.

The isolation that results from group differences needs wider recognition as efforts are made to promote and accelerate equal opportunity. That isolation can be overcome only when we accept ourselves as we are and really believe in ourselves. That self-acceptance gives us the freedom and awareness to share in a different culture.

No one is trapped in any culture. Your culture forms an underlying pattern, but how you develop that pattern is up to you.

Barriers

Barriers can range from lack of formal education to no work experience. In removing barriers, it is crucial to first identify them and to recognize your present limits. Once you identify those barriers that are blocking your way, the next step is to seek the assistance you need in removing them. Outline specific steps and take them, one by one.

Most barriers can be removed through hard work and perseverance. But this means continuing in spite of obstacles that may interfere or conflict with your personal life.

Keep in mind that it is far better to seek advice from someone who has overcome barriers than to give up. It also helps to adopt the philosophy that all things work together for good. Even when a door of opportunity seems to close on you, you may discover later that this happened in order for you to do something else.

Equal Employment Opportunity Today

Our present equal employment opportunity efforts have been evolving for a number of years. Laws have been passed governing federal employment that say minorities have their place wherever their abilities, experience, education, and interests qualify them. Many effective management tools have been designed to assist minorities in realizing their potential and to help them find their place. On-the-job training and career counseling now are available in most fields.

Yet, despite all the laws on the books and all the upward mobility programs, the most effective breakthroughs occur when managers become sensitive to the various attitudinal barriers that hinder equal opportunity. Likewise, a full understanding of affirmative action by all employees will help prevent negative reactions and hostility toward new or promoted workers.

Dorothy Benton currently is an International Cooperation Specialist in the International Park Affairs Division of the National Park Service.

Theme Park Employment

by Connie Desaulniers

A theme park like The Old Country, Busch Gardens, in Williamsburg, Virginia, functions much like a small city.

Hundreds of employees are needed to operate the park's 22 restaurants and 29 shops located in the eight authentically detailed 17th-century European hamlets which comprise The Old Country.

These "countries" like England, France, and Germany all provide rides, stage shows, and other attractions. This summer, the new country of Italy opened requiring even more employees.

The theme park business has grown at a tremendous rate during the last 10 years, and The Old Country, since it was opened in 1975 by Anheuser-Busch, has been part of this growth.

Employee Screening and Selection

The Old Country operates on a seasonal basis, catering to the schedule of many of the park's employees who are high school and college students. In the spring and fall, the park is open weekends only, and in the summer, on a daily basis day and night.

Each year, starting in January, applications for the coming season are taken. With as many as 7,500 applications received in a year, the screening process for employees can become quite involved.

Qualifications vary for the different seasonal jobs. For example, many of the seasonal employees deal with the public on a day-to-day basis. They may be chosen for their friendliness and ability to communicate with others. Another important qualification is availability. Working at a theme park is not a nine-to-five job, but one that requires a flexible schedule with the ability to work weekends and evenings. Age is also a consideration. Most of the jobs require that employees be 18 years of age or older. Yet there are some positions available for 16- and 17-year-olds. Qualifications for the behind-the-scenes jobs, however, may emphasize the desire and ability to work.

Some jobs in The Old Country require a special rapport with people. Busch Gardens

Staff entertainers perform traditional Rhineland folk dances in front of the Festhaus where authentic German foods and beverages are served. David Hume Kennerly

Burgermeister Bob Bauman welcomes visitors to the Festhaus in the Oktoberfest section of The Old Country. Busch Gardens

A trombone player parades in front of the park's German Festhaus during one of his daily performances. David Hume Kennerly

On-the-Job Training

Related work experience is a good qualification for an applicant to have, but it is not essential for a seasonal employee since the park offers excellent on-the-job training. Depending on the job, this training may include slide presentations, practicing ride operations without people, operating cash registers, and learning basic food preparation and cleanliness. The week before opening day, The Old Country holds a practice day for employees' families and friends. This serves as a "dress rehearsal" for park employees.

As an employee advances in the organization to the position of unit supervisor, area supervisor, or lead, he or she receives additional training in the form of three 4-hour sessions, or leadership modules, which cover the following subjects: (1) The Old Country business philosophies, including leadership styles, supervisor responsibilities, and employee welfare; (2) communication; (3) motivation or building a productive working climate.

The hiring and training process is quite different for the Live Entertainment Department. Beginning in January, auditions are held throughout the country to find talented singers, dancers, and technicians for the 15 different stage and street shows at The Old Country. Auditions are held on a first-come first-served basis and are limited to four minutes.

Performers who are chosen in mid-February begin practice for the shows by mid-March, so the productions are ready

Dancers, acrobats, and magicians help make the Chinese Magic Circus of Taiwan a popular attraction. **Busch Gardens**

for the April opening of the park. In an entire season, an entertainer may perform in as many as 564 shows, as well as participate in regularly scheduled singing and dancing lessons.

Advancement Opportunities

The resulting experience in live entertainment has led many of The Old Country's performers to greater heights in the world of show business. Several dancers now are performing with the Jeoffrey Ballet; others in major theatre productions.

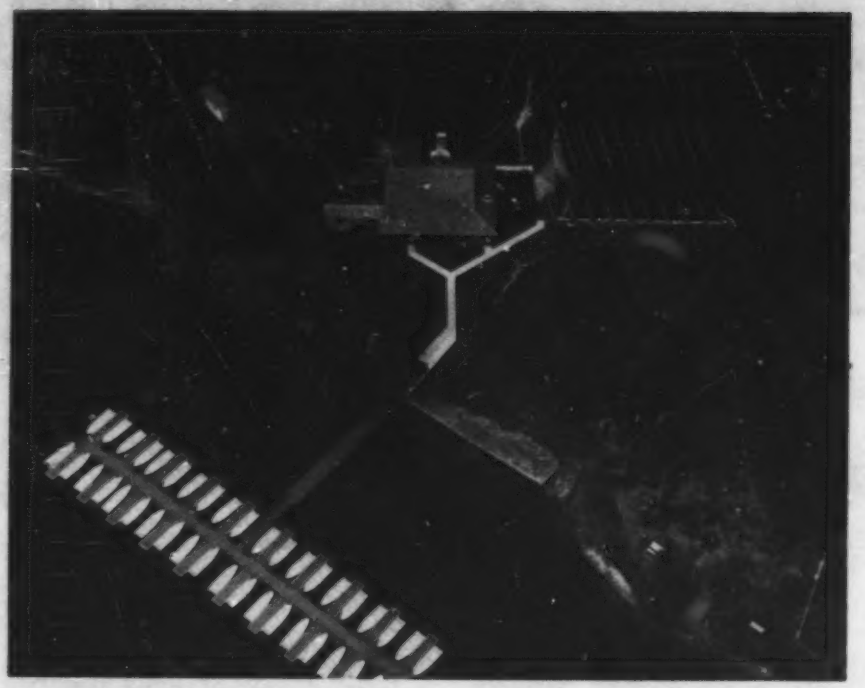
Likewise, the experience and training that seasonal and regular employees receive have led many to management positions at The Old Country. As an example, the experiences of one employee as a ride operator, a zoo attendant, and operations manager provided him with the necessary training to become the general services manager for The Old Country.

Overall, the theme park industry has become more diverse by expanding in the entertainment field, by building water parks such as Adventure Island which is located near The Dark Continent in Tampa, and by developing educational play parks such as Sesame Place near Philadelphia. And as the theme park business continues to grow and mature, career opportunities also are on the rise.

Connie Desaulniers is Marketing Director for The Old Country, Busch Gardens, in Williamsburg, Virginia.

Goodyear's Approach

by Bernard A. Watts



◀ *Trees tower over the Wingfoot Lake Park canteen, its parking lot, and the fishing boat dock.* The Goodyear Tire & Rubber Company

Since the early 1900s, shortly after it was founded, The Goodyear Tire & Rubber Company has clung to the belief that varied social, cultural, and athletic activities play a major role in the development of creative, interested,and productive employees.

Turning that belief into a basic philosophy, the company sought to provide a corporate recreation and activities program and appropriate facilities that embodied the slogan, "Something for Everyone." Today, the result of that effort shines as an example of one of the most complete employee recreation and activities programs to be found in domestic or foreign industry.

Goodyear Hall

Goodyear's formal recreation program began in Akron, Ohio, in 1920 with the completion of Goodyear Hall, built at a cost of $3 million. The block-long, six-story building across from corporate headquarters remains the hub of the company's recreation and activities program.

It houses recreation program executive offices as well as a 1,400-seat theater where Broadway-scale musical productions are staged by performers from within employee ranks and the community. Its stage is as well equipped as most found in New York.

Goodyear Hall's huge gymnasium can accommodate three basketball or volleyball games simultaneously. Around the gym's perimeter is a tenth-mile (.16 km) running track. Employees use exercise facilities with 39 stations. In addition, there are: 18 bowling lanes, used during lunch breaks and for tournament play after hours; men's and women's locker rooms, saunas and sun rooms; and nine large meeting rooms to meet the requirements of the company's 47 different recreational, educational, and cultural organizations.

Clubs

Within these clubs and organizations, employees work on ham radio and CB projects, learn wood carving, photography, acting, and languages. They perform in company bands, travel together, participate in group camping, study the latest disco dances, play bridge, fish, hunt, SCUBA dive, sing, ski on snow and water, make speeches, fly airplanes, jog, shoot at indoor and outdoor rifle and pistol ranges, and play chess, tennis, and golf.

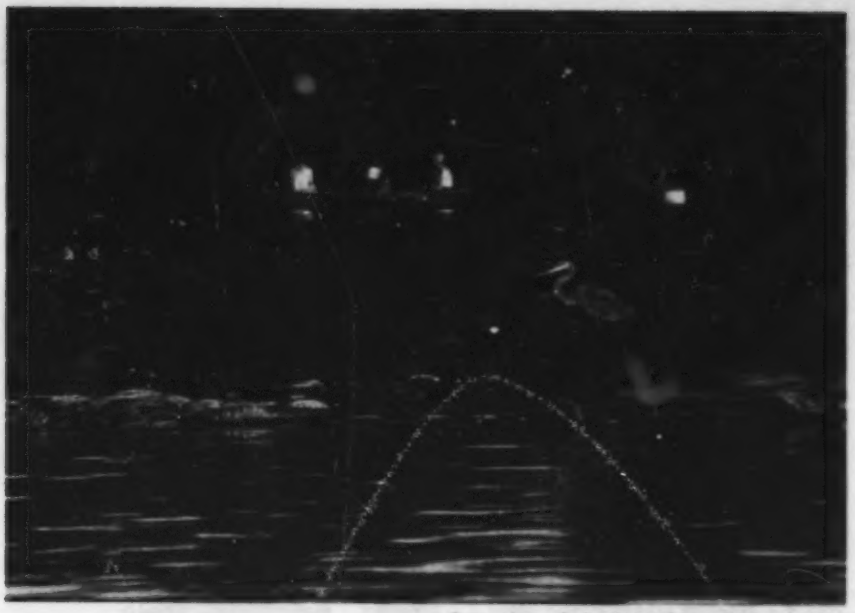
Dotted throughout the company's plant sites are softball diamonds and flag football fields where employee league play takes place. Still another club teaches the joys of food preparation and, of course, dining. Recreation program management has even assisted in acquiring a bowhunters' range for target shooting.

Wingfoot Lake Park

But the glowing gem in Goodyear's recreation program is Wingfoot Lake Park, 75 acres (30 ha) of wooded lanes and sprawling, skillfully manicured, open meadow situated on the shore of a 522-acre (209 ha) lake about 10 miles (16 km) from downtown Akron.

The park takes its name from the winged foot of Mercury, the god of trade and commerce, and a messenger to the other gods. Mercury's winged foot was adopted as Goodyear's corporate symbol 80 years ago.

◀ *Young players polish their golfing skills at Wingfoot Lake Park's new miniature course. The park also features softball diamonds, tennis courts, and picnic facilities.* Goodyear



Scrap tires, chained together and anchored to Wingfoot Lake bottom, serve as an experimental fish breeding habitat. Similar structures designed by Goodyear's Research Division serve as breakwaters in many coastal areas and inland fresh water lakes. Goodyear

Employees and their families enjoy listening to the Goodyear Concert Band perform at Wingfoot Lake Park. Goodyear

The rolling, wooded park offers complete picnicking facilities, swimming, fishing, boat rental, and athletics. Until 1968, it was used by merely a handful of employees.

But then, management's "Something for Everyone" philosophy came into play once more and a master plan for expanding the park was approved. It added a new dimension to company-sponsored recreation for employees, their families, and invited guests.

Wingfoot Park today offers large, fully equipped shelter houses to accommodate group outings and picnics. Those who prefer dining alfresco have the use of 300 picnic tables and outdoor grills located under towering oaks and maples.

The park features four tennis courts, a miniature golf course, four children's playground areas, two softball diamonds, four badminton courts, nine horseshoe courts, and well-equipped restroom and dressing facilities.

At lakeside, a large canteen with a screened veranda offers a variety of fast foods and non-alcoholic beverages. Fishing enthusiasts rent boats and buy bait there, too.

The lake is dotted with company-owned boats during the summer. Employee anglers and their guests have caught bass and other fish weighing as much as 6½ pounds (2.93 kg).

The 1980 season will mark the Wingfoot Lake sailing regatta, organized by company sailing enthusiasts who hope it will become an annual event.

Over the last decade, as facilities were increased and the park expanded, employee use has risen consistently. Last year there was a record 125,300 visits by employees, their families, and their guests. The park may come into year-round use if plans are finalized for the addition of cross-country skiing and ice-skating activities.

Park and Recreation Staffing

So complex a recreation and activities facility obviously requires skilled professional management if it is to operate efficiently and safely.

Park Manager Frank Balint, a 27-year-old Goodyear employee who is a recreation specialist, is assisted by a full-time maintenance supervisor. A lake management consultant also is on the staff and

Paddle boats and row boats are available to employees at the park. Goodyear

Pontoon boat ride is a popular pastime for employees and their families visiting Wingfoot Lake Park. Goodyear

Goodyear's corporate engineering staff assists the company's landscape architect in maintenance. Outside contractors are employed as needed.

Additionally, during its peak season, the park employs 25 to 30 high school graduates and college students to perform maintenance, landscaping, scheduling, and service duties. A smaller full-time staff is kept on during the winter months.

Employee pride in company facilities is evident in the comments to park management. "Our guests just couldn't believe we have all this," said a research division employee following an outing. "My friends were envious of everything," said a tire engineer. "I'll bet this is the best industrial recreation facility in the world," said a member of the metal products maintenance shop.

Perhaps not the best in the world. But certainly Goodyear's recreation program ranks high among facilities of a similar nature. The world's largest tire and rubber company truly has provided "Something for Everyone."

A Growing Source of Park and Recreation Jobs

As a member of the Board of Directors of the National Industrial Recreation Association (NIRA), I am in frequent contact with many of the organization's 2,200 member companies in the United States, Canada, and Mexico.

Companies with parks of their own are very much aware of the contributions of such facilities to employee recreation programs. Happily, more and more companies that lack such facilities appear to be actively engaged in adding them.

Such growth will represent increasing opportunity for college students majoring in park and recreation studies. I strongly recommend that they become members of the NIRA and explore employment opportunities with its member companies.

As a first step, they can send a letter of inquiry to Patrick B. Stinson, Executive Director, National Industrial Recreation Association, 20 North Wacker Drive, Chicago, Illinois 60606.

Bernard A. Watts is Director of Employee Activities for The Goodyear Tire and Rubber Company in Akron, Ohio.

The Industrial Recreation Boom

An interview with Patrick Stinson

In Racine, Wisconsin, the $3 million, 50,000 square foot (4,500 m²) Johnson Wax recreation center has just marked its first anniversary. To meet the social, economic, and cultural needs of some 2,800 employees, retirees, and their families, the company employs a full-time recreation director and six-member staff. They organize and schedule a wide range of club activities, fitness programs, group sports, and games at the center. The facility's central gym alone is large enough to accommodate two basketball courts and four volleyball courts—or seat up to 2,000 people for business conferences.

In Irvine, California, Fluor Corporation just completed construction of a $1.6 million, 32-acre (12.8 ha) multi-use park for some 4,000 employees, complete with softball, soccer, and flag football fields, jogging trail with exercise stations, shuffleboard area, horseshoe pits, picnic facilities, and children's play area. A separate recreation building will contain pool, gymnasium, indoor games, and meeting space for more than 20 special-interest clubs.

Other facilities under construction include Xerox Corporation's new employee fieldhouse in Webster, New York . . . Rolm Corporation's new gymnasium in Santa Clara, California . . . and Cummins Engines' recreation center within the company park in Columbus, Ohio. Industrial recreation appears to be growing by leaps and bounds.

Patrick Stinson is Executive Director of the National Industrial Recreation Association. Here he discusses industrial recreation with *Trends*.

Trends: Mr. Stinson, to what do you attribute the recent growth of industrial recreation programs in general and the increase of facilities being built and staffed by private industry for employees?

Stinson: I believe two factors are involved. First, there's the increasing awareness of management of the benefits derived from employee recreation programs. Where you have employee recreation programs, there tends to be better employer/employee relations, decreased absenteeism, increased employee recruitment and retention rates, and better employee morale in general. And it's

The $3 million Johnson Wax recreation center in Racine, Wisconsin, employs a full-time recreation director and a six-member staff. Johnson Wax

widely acknowledged that a happy employee is a more productive employee.

As a company's involvement in recreation programming grows, its goals and objectives ideally tend to become more organized and formal. At this point the need for a facility and/or park site often becomes apparent.

Secondly, there is the fact that most local park agencies presently are operating under budget restrictions and cutbacks. They simply cannot handle the needs of their own clientele plus the increased burden of serving the employees of local companies. The agencies do not have the funds or staff to organize separate industrial leagues. Many industries, seeing this, are stepping in to take some of the burden off municipal governments.

Trends: What types of activities and facilities most commonly are sponsored by private industry?

Stinson: The four most popular installations at present are softball diamonds, tennis courts, volleyball courts, and fitness trails. A number of companies are providing pools and golf courses for their employees. But these facilities are more expensive to build and maintain, so fewer companies can afford them. Picnic areas also are popular.

Trends: What kind of staffing do these industrial recreation facilities and programs require?

Stinson: Of course, it varies with the size of the program and facility. But generally, one or two maintenance people are needed, as well as an overall recreation administrator and about two programmers. Most companies look for administrative staff with professional recreation degrees. These staff members schedule and run the activities and are responsible for keeping the facility filled at peak hours.

Keep in mind that once a company has a facility, that facility gets more intensive use than many municipal ones. This is due to company shifts. The company recreation facility often is used 24 hours a day, to service employees from each shift.

Trends: What qualifications and areas of expertise do companies look for in hiring park and recreation staff?

Stinson: Generally, an applicant should have a degree in recreation or some related field. A good business background is another plus. One area we've found many applicants lacking in is that of communications. Journalism skills and knowledge of public relations comes in very helpful, since industrial recreation programs need to be promoted to both employees and the community at large. Since most industrial recreation departments report to the main personnel officer, people interested in park and recreation jobs should approach the company personnel department.

Meet Your Colleagues

Robert Conner, *Therapeutic Recreation Specialist, Washington, DC Department of Recreation*

An annual Fun Festival is sponsored by the Program for the Mentally Retarded and Physically Handicapped. Gene Young

Staff member lends skaters a helping hand. Staff design recreation programs to accommodate each participant's disabilities, interests, and needs. George Geralis

Having an innate love of children, working as Director of the Lincoln Therapeutic Recreation Center, one of eight such facilities operating under the Program for the Mentally Retarded and Physically Handicapped within the Special Programs Division of the Washington, DC Department of Recreation, offers me the opportunity to do what I enjoy best. Programming services for mentally handicapped and hearing-impaired preschoolers also provides me with constant challenge and deep satisfaction.

Over the past eight years, in working with people with various handicaps, I have become sensitive to the wide range of conditions that can disable an individual, including the influence and impact of his or her environment. Through the use of recreation as a tool, I have been able to design creative play that accommodates a participant's disability, limitations, interests, and needs. In many cases, the results achieved have been astonishing.

Knowledge and familiarity with human growth and development is a necessary qualification for my type of job. It alerts me to the needs of a participant and helps me determine what games and activities will best develop his or her deficiencies. For example, I might use song to encourage a participant's verbalization ability, then help transfer the newly awakened verbalization from singing to speaking form.

Because therapeutic recreation is not based on success or failure, individuals often relate better to recreational tools than to traditional educational tools. Properly used, therapeutic recreation can give parents, teachers, and counselors better insight into a child. It can produce demonstrable changes in a child's outlook and abilities.

Through recreational experiences I have been able to reduce many common misconceptions about handicapped individuals and ultimately have effected positive changes in attitudes and behavior toward the handicapped with whom I work. Every step in this direction makes it easier for disabled individuals to function within their own environment.

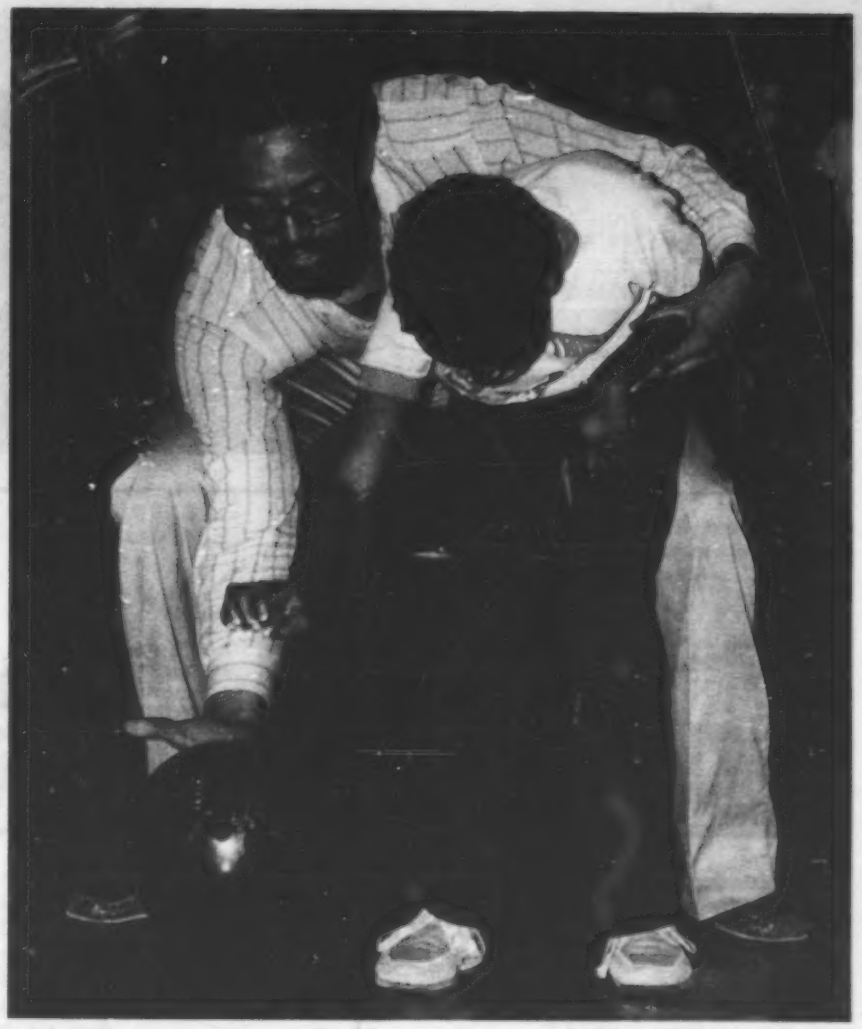
I gain great satisfaction from reducing attitudinal barriers toward handicapped individuals and helping each person achieve his or her full potential. It is most rewarding to see a participant's self-isolation turn to self-expressiveness or to watch the healthy development of interpersonal peer relationships (with both handicapped and non-handicapped individuals). These job accomplishments enhance my own sense of self-worth.

There are some problems. Unfortunately, working within a human service field, you always seem to have a staffing problem. Never do you have sufficient professional or para-professional support personnel. Nor do you have adequate funds for necessary supplies and equipment. But this seems to be a problem common throughout the whole park and recreation field. The "Powers that Be" have yet to be convinced of the importance of recreation.

With the current emphasis on acquiring "credentials," I plan to return to school for an advanced degree in therapeutic recreation. This will help me attain my ultimate goal—teaching therapeutic program development and/or activity analysis on a university or college level. In preparation for these academic endeavors, I have presented and assisted in presenting various workshops and congresses on both the local and national level.

All this and more has made my job as a therapeutic recreationist invigorating, stimulating, and just plain interesting.

Robert Conner interprets a song for deaf children and their parents. Gene Young



Therapeutic recreation specialist helps disabled child participate in the annual bowling tournament sponsored by the Department and Bowlamerica. Gene Young

Deaf performers star in a production of "The Toy Maker," at the Lincoln Therapeutic Recreation Center. Gene Young

Social events at the Lincoln Therapeutic Recreation Center help handicapped people gain confidence, express themselves, and maximize their full potential. Gene Young

Bill Matheson, *Maintenance Supervisor, Fort Worden State Park, WA*

For 21 years, Bill Matheson has been involved in the evolution of Port Townsend and its Fort Worden State Park, first as a contractor, then as maintenance supervisor for the park. WA State Parks

You won't run across a place like Fort Worden, Washington every day—at least not unless you work here, as I have for 21 years. First of all, Fort Worden isn't a real fort any more. The military packed up and left in 1957. But when it was built back in the 1890s, Fort Worden represented the ultimate in military technology.

Fort Worden was headquarters for a whole network of coast artillery stations that guarded the strategic entrance to Puget Sound and the Pacific Northwest. As it happened, these defenses were never tested by an aggressor. But a walk through the main fortifications gives a good idea how ready they were in the event of invasion.

Now, depending on whom you talk to, Fort Worden is a park, a conference center, an historic landmark, an innovative arts and education experiment, a camping retreat, or one of the best salmon-fishing spots around. It is actually all these things, and the story of the renovation and adaptive use of both the fort and the adjacent little town of Port Townsend, reflects the changes in our ways of looking at things over the years. It also reflects the changing focus of my work as a contractor and maintenance supervisor during this time.

Port Townsend is an outstanding, living example of a Victorian-era, western seacoast town. During the last half of the 19th century it was a port of call for the great sailing cargo ships. The most prosperous citizens built their mansions on the hill, and respectable folk steered clear of the rowdy saloons and brothels of the downtown waterfront area.

"Modernization" of the Fort and Town

At the turn of the century, circumstances conspired to nearly freeze Port Townsend in time. The transcontinental railroad never made it up this way, and the newer steamships found it just as easy and more profitable to cruise on into Seattle or Tacoma. The new fort took on a greater role in the economic survival of the community, and helped sustain it through two world wars.

I grew up in Hadlock and Chimacum, just outside of Port Townsend. During the late 1940s and most of the 50s, I worked around the area as an independent contractor. Looking back on those years, I recall that most of my jobs involved "modernizing" those old Victorian houses and commercial buildings. We were lowering ceilings, covering up hardwood floors, ripping out ornamental moldings and door frames, and converting some of the biggest houses into apartments. Now, people think that was tragic and destructive, but it was what folks wanted then.

Fort Worden got its share of the same treatment. The State of Washington acquired the facility after the military left, and in 1958, reopened it as a treatment center for juvenile delinquents. I signed on with its maintenance crew in 1959. Naturally, I became involved with the process of adapting the fort to an entirely new purpose. That adaptation plan called for the eventual razing of all the old buildings, and replacing them with the most modern, streamlined treatment facilities.

Now, when I look across the parade grounds at the stately barracks and administration building, or at the long row of restored officers' houses, it's hard to imagine how we could have been willing

Old officers' houses now accommodate vacationers at Fort Worden State Park.
WA State Parks

Waterfront of Port Townsend, date unknown.
Courtesy of the Jefferson County Historical Society Museum

to let that happen. But the treatment center was our livelihood, and we saw the facility in relation to the center's needs. I guess sometimes the past is a little like a large mural—you really can't see the whole picture without standing back a ways.

New Efforts to Reclaim and Adapt Historic Roots

During the 1960s, people started stepping back far enough to see what had been there all along. Of course, at that time, attitudes about a lot of things were changing. Little by little, folks started working their houses back to the original styles—tearing off the shingle siding, reconditioning the clapboards, stripping and refinishing the woodwork, pulling up linoleum, resanding wood floors, and restoring a lot of the characteristic ornamentation.

Farsighted people had their eyes on the fort too. When the treatment center closed in 1971, a development plan emerged that would capitalize on the site's combination of historic significance, scenic beauty, and extensive physical facilities. I stayed on with a nucleus of the maintenance crew to watch over the place while details were being completed for a joint venture between Washington's State Parks and Recreation Commission and the State Arts Commission. State Parks was given the responsibility for managing and maintaining the grounds and buildings; the Arts Commission created an organization called Centrum to design and carry out extensive arts, cultural, and educational programs at the fort.

My crew and I were lucky enough to become part of the new park's maintenance department. So, like I said, it's been 21 years, and I think my association with the old fort becomes more rewarding all the time.

As Port Townsend has found new vitality by regaining some of its Victorian grace and charm, I've seen Fort Worden assume a new identity that draws on its heritage as well as the opportunities its facilities and programs offer to campers, boaters, musicians, writers, painters, and outdoors lovers. In the last few years, Centrum's program has gathered a lot of steam and some national attention, and the campground and officers' houses have been discovered by vacationers.

As head of the maintenance department, I share responsibility for the quality of the visitors' experiences here. I guess the best part is seeing people of all ages finding something about the fort that is special to them. It's great to see an older couple quietly enjoying the view of the Cascades from their campsite, or a group of excited youngsters from one of the creativity workshops heading up the road to explore the bunkers on the ridge. I've come to realize that every day, someone is benefiting in an important way from the work we do here.

Fort Worden will be in for more changes through the years, but the overall plan seems to be working—and I think the fort's past, present, and future are settling into a long period of peaceful coexistence.

Bill Matheson is Head of the Maintenance Department at Fort Worden State Park and Conference Center, located on the northeast tip of the Olympic Peninsula, just outside of Port Townsend, Washington. He is a lifetime resident and active civic leader of the Hadlock-Chimacum-Port Townsend area.

Roy W. Feuchter, *Director of Recreation Management, USDA Forest Service*

As Director of Recreation Management for the Forest Service, I am responsible for the overall recreation management program on the 187 million-acre (74,800,000 ha) National Forest System. Almost since the inception of the National Forest System, recreation has been recognized as an important use of national forests.

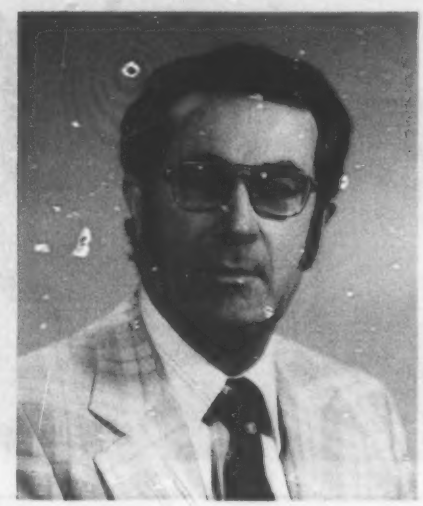
Those forests now provide 220 million recreation visitor days of use annually on some 11,800 developed sites which include campgrounds, picnic grounds, organization camps, boating and swimming sites, as well as some 220.2 million visitor days of use in dispersed areas where recreation opportunities are provided without developed facilities. Some services are provided by the private sector on the national forests operating under special use permits similar to long-term leases. Included in this category are resorts, organization camps, recreation residences, packer/outfitter operations, etc. The resort category also includes approximately 230 winter sports sites, including the majority of the major ski areas of the United States.

Technical Support for Recreational Policy Development

Under the decentralized management style of the Forest Service, all of these recreation opportunities are managed by on-the-ground administrators. Consequently, my job does not involve day-by-day administration of facilities or recreation opportunities. Rather, I serve as the overall director of the professional recreation staff that provides technical support to the Chief of the Forest Service for the development of overall recreation policies and strategies in the national forests.

The job is particularly challenging in a number of respects. The sheer magnitude of the operation encompasses a massive variety of situations, conditions, and personnel. Our line-staff, highly decentralized organization also provides unique challenges in developing uniformity of approach and in maintaining high standards of quality.

The need to accomplish other types of natural resource management concurrently with providing outstanding recreation opportunities for the public is



Roy Feuchter enjoys operating on the "national scene" in a challenging field of public service. USDA Forest Service

likewise a challenging opportunity. It offers additional ways to accomplish recreation objectives beyond those that would be used if only recreation dollars were being managed. At the same time, a large amount of coordination is required with the other functional management activities such as water, wildlife, grazing, and timber.

Wide Range of Responsibilities

My responsibilities also include wilderness management. The Forest Service presently manages some 15 million acres (6,000,000 ha) of the National Wilderness Preservation System and there are proposals before the Congress for doubling the size of that system. Wilderness management represents another exciting challenge in that we must manage for both the wilderness resource and, to the extent possible without adverse impact on that resource, provide wilderness recreation opportunities for the public.

Direction of the cultural resource management program is another aspect of my job. The national forests represent a vast storehouse of cultural resources and we presently are starting to survey these resources extensively. As the cultural resources are identified, we will develop management plans to provide for their protection and appropriate utilization.

As time goes on, public utilization of these resources often will be handled through our visitor interpretive services program, another important aspect of my job. Through this activity, we provide the public with information about available recreation opportunities, how to participate in them, and when appropriate, the meaning behind the interesting natural and cultural phenomena and activities they see while visiting the national forests.

Our forest interpreters also provide us with user feedback that can be valuable both in managing our varied natural resources and in our recreation research efforts. The Forest Service has one of the largest recreation research programs in the world. This program is operated separately from my staff responsibilities, but is closely coordinated with our recreation activities.

Visual resource management is still another responsibility of my staff. We have developed guidelines and handbooks for field personnel use to ensure that the visual resource is considered in all our management activities.

I feel my job is the best position in the Forest Service for several reasons:

1. It allows me to work in an exciting, challenging field of public service.
2. The natural resource-based recreation opportunities which we provide are, in my opinion, second in importance to the American people, only to the need for food and shelter.
3. I feel we play a significant role in the social, mental, and physical well-being of the nation.
4. I find it stimulating and exciting to operate on the "national scene."

This "national scene" part of my job involves contacts with most of our widely dispersed field units, with national outdoor recreation organizations, and with the Congress. My staff and I spend a good deal of time responding to the special needs of the Congress and in working with the Congress, other federal agencies, and the executive office of the President to develop meaningful new recreation policies and programs for the American people.

Personal Background

I am a long-term career employee with the Forest Service, with an academic background as a professional forester. In my 20 years of experience within the

Forest Service, I have served in numerous positions and locations. I believe this is a necessary element in the career development of any person who aspires to top leadership in an organization such as ours. Admittedly, there is some impact on families when numerous moves and job changes are involved. Yet I have found the moves to be interesting and broadening for both my family and myself and view them as a benefit rather than a detriment.

We do notice, however, that many young professionals are increasingly reluctant to move these days. I think this is unfortunate, since the career building aspects of different duty assignments are extremely important. If our best people are reluctant to move, there is a danger that we ultimately may end up with "less than the best" in the top-level jobs.

One important personal trade-off that I made during my career was the year I spent working on Capitol Hill in the Congressional Fellowship Program. Although this removed me from the mainstream of the Forest Service and recreation activities for almost a year, it was a period of strong personal growth. While very demanding, this experience was of great importance and significance in developing my ability to function in my present position.

The principal challenge that I see facing all recreation professionals today is the need to clearly establish in the minds of the policy makers of this country the true value and importance of outdoor recreation to the American people. Most of us professionals in the recreation field recognize that value and importance. The general public indirectly recognizes it. The problem is that the policy makers, at whatever level in the country, still approach recreation as a "nice to have" or "only fun" type of public activity. The social values to the nation, of the recreation that we provide, simply is not yet being adequately recognized. I believe it should be the duty of every recreation and park professional to help identify these values.

Mary Alice Bivens, *Director.*
Arizona Outdoor Recreation Coordinating Commission

Meeting people is something I very much enjoy—but to do so through the written medium becomes a one-way experience. As I share a bit of myself this way, I hope a time will come when some of you who are reading this will introduce yourself to me in person. That would be so much more fun.

As the Director of a state agency, though small in staff size, I find myself facing more challenges, both personal and professional, than I'd ever dreamed. As my career has unfolded I've discovered each layer has brought about a keener insight into people; their feelings, reactions, and expectations. The vast experiences I have had along the way only partially prepared me for this position.

Oh, to be the Director, the Boss! How great it would be; how differently I would handle things; how easy the decisions would be; how much fun it would be to be "telling" others what to do and when to do it!

Not so! The decisions never are easy, especially when they deal with personnel matters. I don't enjoy "telling" my staff what to do. I prefer that we work together, as a team, to resolve problems and accomplish tasks. I find it lonely and often discouraging to be the Director. But, I love it!

Though the two main functions of the agency are the development and implementation of the Statewide Comprehensive Outdoor Recreation Plan (SCORP) and the granting of Land and Water Conservation Fund (LWCF) monies to needed and priority projects, our major task is working with people. People who are mayors, park managers, and auditors. Others who are recreation directors, legislators, and members of the press. Participants in outdoor recreation come in all sizes, shapes, colors, and from all walks of life. My ability to deal with *all* people is the key to the success of our agency and subsequently the LWCF program. With a total staff of twelve, the office more closely resembles one big family. We know each other professionally and personally. This adds to the problems, but more significantly, enables the successes.

The most rewarding part of my job is making it possible for people to be happy. My personal success is measured by that of those with whom I work—both in and out of the office.

Mary Alice Bivens enjoys the challenges and opportunities her job offers and the insight it gives her into people.
AZ Outdoor Recreation Coordinating Commission

There are, and I hope always will be, trade-offs. I've traded time with my family for completing a report; time to hike in the mountains or raft down a river, which I dearly love to do, for time reviewing Rare II drafts or Commission meeting minutes. I even must trade being a "nice guy" for being a hard taskmaster. However, the end product is, hopefully, a productive and stimulating working environment; an effective and efficient agency; and a valuable asset to the state of the outdoor recreation art.

A quick glance at me will let you know I'm over 40 (even over 45). I'm a college graduate with many years of varied experience in the park and recreation field. Add to that a year of college in Lebanon; travel in Europe and the Middle East; marriage and raising three beautiful children; living in three distinctly different parts of the United States (Alaska, Georgia and Delaware, and Arizona); and establishing a career in the field of recreation planning. Now you have a composite picture of me.

The future, for one who's had the best of both worlds (home and career), couldn't be brighter. I'm where I want to be, now. The challenges continue, the opportunities for growth are ever present, and the joys of meeting new people and sharing ideas never end. How do I feel about my job? Great! What does my work mean to me? A new experience every day! What are my future career goals? To close my career with a "job well done."

Jon J. Gruver, *Recreation Specialist, U.S. Navy, Special Services*

Military recreation. The words conjure up mental images of teams of athletically gifted men traveling from base to base to compete. While these elite athletes still are sought after for interservice and international competition, the spectrum of leisure services for the military community—and I stress community—has taken a radical turn in the past decade.

While charged with the responsibility of providing leisure services for the active duty military, the Special Services Department at the Naval Weapons Station in Charleston, SC, also is responsible for the formidable task of providing programs for the adjacent housing area, Mendal Rivers Park. Quartering approximately 11,000 military personnel and their dependents, it is the largest singly managed, contiguous Navy Housing area in the continental United States and the second largest in the world. The department also is responsible for providing programs for the eligible active duty and retired families living in the surrounding communities raising the eligible number of participants to approximately 30,000.

As head of the Recreation Services Division, I am responsible for establishing and administering a well-rounded leisure activities program for these 30,000 patrons. With the establishment of the all-volunteer military concept, new emphasis is placed on retention of the sailor. This makes my job uniquely challenging. My division must program not only the usual or general recreational services, but provide for special interest groups as well. For example, when a ship, homeported in Charleston, was scheduled to be sent to Italy for a three-year tour, we set up an Italian class for dependent wives in our Youth Center.

Due to the long cruises that sailors are involved in, sometimes up to eight months, another unique aspect of the job is apparent. We must have a wide range of interesting activities for women. While not a true matriarchy in the social sense, the women in a Navy household are very independent and self-sufficient, basically out of necessity.

Traditional intramural sports remain popular recreational attractions for active-duty sailors.
Jeff Gruver

A wide spectrum of leisure activities, such as this youth soccer clinic, now serves the entire military community.
Jeff Gruver

My work as a recreation programmer is very self-satisfying. I am able to realize fairly immediate tangible results from programs I implement. Likewise, I receive prompt feedback, either positive or negative, from the participants. This is what attracted me to the field of recreation in the first place, that immediate response from the patrons as to the worth of the program.

My career goal is to attain a Special Services Director's position, but that comes only after gaining the knowledge of all aspects of the job and these are very diverse. Special Services offers not only the usual municipal recreational services but also many of the commercial services such as ceramic shops, movie theaters, golf courses, bowling centers, woodworking shops, and child care centers.

As one can tell, military recreation is an exciting field in leisure services which offers the professional recreation practitioner challenging employment, good financial rewards, and a chance to travel all over the world to seek new job opportunities.

Marty Silver, *Seasonal Interpreter and Park Naturalist, Warriors' Path State Park, TN*

Marty Silver helps youngsters interpret a tree's life history from its stump. TN State Parks

Tennessee's Department of Conservation considers interpretation a unique means to an essential end—conservation through public education and awareness.

Vital to this awakening of awareness in our Tennessee State Parks are the park interpreters. These permanent and seasonal naturalists work throughout the state park system in positions where they can achieve maximum exposure and impact from their limited number.

Seasonal naturalists are college students hired for the season of peak attendance, at some 15 to 20 of the state's 43 parks. After being thoroughly trained by the permanent interpretive staff, the seasonal naturalist is completely responsible for the summer interpretive program at his or her park. Programs must be researched, developed, transcribed, promoted, and shared with park visitors. Every one of these phases is the responsibility of the seasonal. At the same time, the seasonal naturalist may become involved in oral history and folklife research, or in the construction of trails and other interpretive facilities.

By the end of summer, the naturalist has provided the park with a wealth of written research and transcribed programs. This body of information and ideas insures that the interpretive program continues to grow. Our park visitors share in programs that improve in quality every year.

Having worked for two years as a seasonal naturalist with the Tennessee Department of Conservation, I have seen many goals achieved by this statewide program. You can well imagine the challenges and responsibilities we face as we strive to share with park visitors and with the surrounding community the unique natural and cultural features of our park, and as we awaken their interest and appreciation.

Our frustrations are those common to any public relations position. But these are only a minor consideration. Rewards far outweigh any difficulties. We are given the opportunity to exercise our creativity as we reach out to touch the lives of literally thousands of people. We are given complete support from the entire park staff. At the end of a season, we come away with the knowledge that we have scattered many seeds, some of which will yield the fruits of appreciation and concern for conservation.

Tennessee's seasonal naturalists are completely responsible for summer interpretive programs at their state park. TN State Parks

Thus, our seasonal interpretation job becomes a hope for the future. In regard to our own futures, we can prove ourselves capable and move into permanent interpretive positions as I have done. Or we can go on to pursue other opportunities in related fields. But perhaps most importantly, the seasonal interpretive program brings tangible benefits to all Tennesseeans as it inspires the people of our state to learn and care more about their natural heritage.

Preparing Park and Recreation Professionals Today

by Richard Kraus and Del[illegible] Williams

Many park and recreation curricula emphasize national resource management.
National Park Service

As we examine parks and recreation as a career field today, higher education emerges as an important area of concern. What are the most significant trends in park and recreation curricula in American colleges and universities? How widespread are degree programs in this field, and how effective are they in preparing professionals for various leisure specifications? And—a question not to be ignored—how solid is the acceptance and support of such degree programs in terms of hiring standards today?

First, it is important to recognize that there has been a striking growth in the number and strength of college and university curricula that prepare park and recreation personnel. From a mere handful of such programs after World War II, the most recent surveys carried out by the Society of Park and Recreation Educators reveal that there are over 330 two-year, four-year, and graduate curricula in the United States and Canada. As an example of growth in this field, the students majoring in parks and recreation numbered over 37,000 by 1978.

Diversity of Programs

Today's higher education programs in parks and recreation are extremely diversified. Many college departments continue to be linked to health and physical education, although they have developed their own specialized courses, faculty members, and learning resources. Some departments, particularly those in colleges with strong agriculture, forestry, or landscape design programs, provide highly specialized curricula in resource management with an outdoor recreation emphasis. Others have a strong link to the field of health services, and stress therapeutic recreation as a degree focus. Still other colleges and universities give emphasis to community recreation, voluntary agency programming, or industrial, armed forces, campus, or commercial recreation.

Overall, the growth of higher education in parks and recreation has continued almost uninterrupted over the past three decades, with some recent slackening in two-year programs, but a continued rise in four-year and graduate curricula. At the same time, the publication of a growing number of textbooks, the expansion of research efforts and journals, and the establishment of a nationwide system of accreditation by the National Recreation and Park Association all have strengthened this field. Programs are of higher quality today than in the past, and are linked in many cases with excellent field work or internship courses, as well as the continuing education institutes or workshops for practitioners that are offered by a number of the larger university programs.

Thus, on the face of it, there would appear to be a healthy development of higher education in parks and recreation today. However a number of critical questions continue to be raised.

What is the real value of higher education in leisure service? Does it actually represent a field of significant scholarship and professional specialization? Is it necessary for employment in the field? Should professional preparation in parks and recreation be primarily of a philosophical or practical nature? What are the pro's and con's of specialization in this field, as opposed to taking a degree in other related fields such as business administration, biology, or social work?

If there is a real justification for specialized higher education in parks and recreation, why aren't there more stringent educational requirements for work on a professional level in leisure agencies?

The economic and political aspects of managing recreation facilities today demand specialized training. John Alexandrowicz

Value of Specialized Professional Preparation

The key question has to do with the basic need for specialized professional preparation in parks and recreation today. If so many successful park and recreation managers, supervisors, and administrators have come from other areas of academic preparation, why is professional study in parks and recreation necessary?

Before answering this question, it is necessary to ask whether park and recreation work actually constitutes a professional field of service today. Clearly, if it does, then it requires its own system of higher education, like other professions.

There are strong arguments to be made that recreation service does meet the essential criteria of a profession. It meets important social needs, it has strong national and state professional societies, and it increasingly is becoming recognized as a diverse and appealing area of employment. Obviously, leisure has emerged as the basis for major economic enterprise in modern society. With the growth of free time, the expansion of cities and metropolitan areas, and the realization of the values of constructive leisure experience, government on all levels has accepted the responsibility for providing a network of recreation facilities and programs. Similarly, the growth of commercial recreation, quasi-public agencies like Y's or Boys' or Girls' Clubs, and therapeutic recreation in hospitals, nursing homes, and other treatment settings, has meant that hundreds of thousands of persons are employed professionally in leisure service today.

Broad Body of Knowledge and Expertise Needed

To function effectively, these individuals require a specialized body of theoretical knowledge and practical expertise.

The task of municipal park and recreation administration, for example, is far more complex today than it was even a relatively short time ago, during a period of more generous funding. The typical public administrator in a city, town, or park district must be knowledgeable in budget planning and grantsmanship; design, construction, and maintenance of facilities; program development for varied populations; public relations; and community organization techniques. Policy development, systems planning, careful evaluation and research, and similar functions are all part of the manager's job today.

The needed skills vary according to the individual's specialization. For the director of a state or county park system with a strong management emphasis, it is necessary to have in-depth knowledge of land-use planning methods; horticulture, turf, wildlife management; and similar processes. In contrast, therapeutic recreation specialists must be familiar with the etiology and treatment of varied forms of disability, and must be able to develop prescriptive programming, analyze and modify activities, provide leisure counseling, and work closely with other members of the treatment team. The inner-city recreation specialist must be able to work closely with community groups, including the disadvantaged and racial or ethnic minorities, and must be capable of developing programs with significant social goals.

On all levels, specialists in other areas of recreation service must have in-depth professional expertise if they are to be successful. Indeed, a number of colleges and universities now have developed competency-based curricula to ensure that the specific skills related to each area of professional practice are being mastered by students.

In addition to practical competency, however, park and recreation professionals today also must have a solid theoretical understanding of the field. If

Therapuetic recreation specialists must be familiar with the etiology and treatment of various disabilities and able to develop prescriptive programming.
National Institutes of Health

they are to operate on policy-making, supervisory, or administrative levels, they should have a common core of knowledge about the nature of leisure in modern society, the psychology of play, and the goals and objectives of organized recreation service. Particularly if they are to function effectively as spokespersons for recreation and leisure within a complex social environment with many conflicting demands for community support, such knowledge is essential.

In other words, the task of professional leadership in parks and recreation today combines the elements of "how-to-do-it" expertise with the more theoretical understandings and principles that help to guide agency development, policy-making, and program and facility management processes. Just as in other, more established professions like law, medicine, or education, this background can be obtained best through formalized and systematic study in colleges and universities that is enriched by supervised field experiences.

Employment Standards in Parks and Recreation

Given the position that specialized professional preparation is highly desirable for career employees in this field, one then must ask—why aren't there stronger educational standards for employment in public or voluntary leisure agencies?

Only a handful of states have passed legislation requiring public employees in park and recreation departments to meet certification criteria that include possession of a specialized degree in the field. While a greater number of states have registration plans that serve to identify qualified professionals, such plans are not legally enforceable for employment screening; they depend upon voluntary compliance. In the area of service to special populations, for example, the National Therapeutic Recreation Society has established a national registration plan which has screened and registered several thousand practitioners. However, many agencies ignore the NTRS standards in their hiring process.

Similarly, in Civil Service agencies on various levels of government, educational requirements often are loosely stated, permitting the hiring of individuals who have had no specialized training in parks and recreation at all. According to a national study by Henkel and Godbey, only a small fraction of full-time employees in public, voluntary, commercial, industrial, and other specialized areas of park and recreation service hold degrees in this field. This situation obviously undercuts the status of recreation as a respected profession, in comparison with other occupational fields where practitioners must meet established educational requirements.

There are a number of obvious reasons why higher education has not become more widely accepted as a job requirement by hiring agencies.

First, recreation is a relatively new field, and there is a continuing need to demonstrate to the public at large and to agency heads in particular that specialized professional preparation in it is essential. For many, it is difficult to distinguish between the act of part-time program leadership (which millions of people carry on in one form or another, as Scout leaders, Little League coaches, or in mother volunteer settings) and the more demanding forms of full-time, paid professional service.

Second, there are so many different types of leisure agencies and settings that it would be extremely difficult to develop a systematic and widely applicable set of standards for all recreation workers. The very diversity of the overall park and recreation field means that practitioners often are more attached to their own specializations than they are to the broader field of leisure service in general.

The inner-city recreation specialist must be able to work closely with community groups and be capable of developing programs with significant social goals. Richard Kraus

Political pressures often prevent the development of more effective employment standards that might reduce the freedom to hire and fire public employees with a free hand; in addition, many Civil Service boards are reluctant to impose rigid hiring qualifications on the full range of occupational fields under their jurisdiction.

Given these obstacles, it seems clear that what is needed is a stronger sense of professionalism throughout the entire field of park and recreation service, and a recognition that it will function best and gain full public understanding and acceptance only if it has highly capable practitioners at all levels of staff operations.

As suggested earlier, it is obvious that the field now demands much more sophisticated expertise from its professional managers than in the past. Working with new and different populations, creating programs suitable for new kinds of environments, and developing synergetic relationships with other public, voluntary, or business organizations, all demand such expertise.

Given the economic constraints and pressures that exist today, public park and recreation administrators, for example, must become familiar with revenue sources management, systems planning, marketing and feasibility studies, cost-benefit analysis, and similar contemporary techniques. Reconciling the altruistic, community-service goals of public and voluntary agency programs with the realistic needs to market a product and maintain economic viability represents a particularly critical challenge today.

While it is difficult to demonstrate conclusively that such expertise can only be obtained through specialized higher education in a degree program, this principle is readily accepted in other professional fields. Indeed, the assumption that the individual who has taken university courses under well-qualified instructors in such areas as the theory and philosophy of recreation and leisure, community organization, program planning and leadership, supervisory and administrative methods, needs of special populations, planning, evaluation, and research—all buttressed by an enriching field internship and a broad liberal arts component—will be more capable than the individual who has had no such training, appears to be a reasonable one.

Supply/Demand Problems Today

Within this broad picture, a new and critical problem faces many college and university park and recreation programs. It is the concern that the sharply expanded higher education system in this field is turning out far greater numbers of graduates than the field itself can absorb.

In part, this is obviously a matter of job availability. Given the recent cutbacks in public funding, with California's Proposition 13 being the most dramatic example, job freezes have been instituted in many communities. Similarly, problems of soaring operational costs and limited funding have compelled staff freezes or cutbacks in many voluntary and therapeutic agencies. In still other settings, the fact that park and recreation graduates are not given strong hiring preference has limited their employment advantage in an extremely competitive job market.

With many of the newly established college curricula turning out literally hundreds of park and recreation graduates each year, it is necessary to ask whether we are training too many park and recreation professionals. Should departments set arbitrary limits on their number of ma-

Community centers, voluntary agencies, campus and industrial recreation facilities all need qualified personnel to run their programs. Richard Kraus

jors? Should we discourage new curricula from being established—or encourage the phasing out of marginal programs? What is a realistic and intelligent policy to follow in this area?

Thoughtful educators and practitioners recognize that the problem must be seen in perspective.

Need for Park and Recreation Professionals Expected to Grow

First, the hiring picture is not as negative as some have assumed. A recent study of employment opportunities in the northern California region has shown a generally favorable job picture, with the exception of openings in the public sector. Similarly, a number of colleges in the Northeast, including Temple University, Slippery Rock State College, and Montclair State College, have carried out follow-up studies of their graduates which indicate that a substantial number of park and recreation majors have been successful in obtaining jobs in the field, despite gloomy forecasts.

Indeed it should be recognized that the recreation field itself must inevitably grow and expand in the years ahead, as a consequence of continuing work/leisure trends and favorable public attitudes. There obviously will be a need for highly qualified park and recreation leaders and managers in the 1980s and the decades beyond. More and more, we are becoming a leisure-oriented society, and our demands will have to be met through skilled professional leadership.

However, it also is obvious that colleges and universities no longer can afford to concentrate solely or primarily on the training of municipal recreation and park practitioners, which has been their chief focus in the past. Realistically, these jobs today are in short supply. Instead, students should be given the opportunity to major in other areas, such as voluntary agency, commercial, industrial, therapeutic, and campus recreation. It is true that many of these fields have not typically hired park and recreation graduates in the past. Therefore, strong efforts must be made to draw them into the orbit of professional recreation service. This can be done by framing new, high-quality curricula in these areas, by involving their key personnel more fully in appropriate professional societies and educational programs, and by placing field work students more fully in such settings.

Courses Must Be Better Geared to Needs of the Field

However, this is not a sufficient response to the supply/demand problem we face today.

Students must be given accurate and up-to-date academic advice and career counseling, as well as effective strategies and skills for getting jobs.

Courses must be geared to actual needs in the field, and should be strengthened by a heavy input from leading practitioners. College and university educators should develop two-way links with field agencies, particularly with respect to consulting, evaluation, planning, and research needs.

Strong efforts must be made to resist enrollment or credit-production pressures, and to maintain the goal of quality over quantity on all levels. Programs should become more selective in the recruitment and admission of students.

Weaker curricula or those that do not place a reasonable percentage of their

Solid intern or field experience is a necessary part of professional training for park and recreation careers. Richard Kraus

students must be permitted to fall by the wayside, and rigorous needs assessment should take place before new college and university programs in this field are established.

Instead of seeking to be "all things to all people," park and recreation curricula should develop their individual strengths with, for example, land-grant or rural colleges or universities focusing on resource management while those in complex urban environments focus on human service and programming needs.

Increased efforts must be made to upgrade hiring standards in the field and to encourage professionalism on all levels. If park and recreation service continues to be a scattered field with poorly defined educational requirements for its practitioners and the assumption that "anyone can do it," its future will be limited seriously. Closely linked to such efforts must be an improved public understanding of the significance of recreation and leisure in modern society.

Exciting Times Ahead

We have a remarkable opportunity in the years ahead. Will recreation service move in the direction of primarily commercial, profit-oriented agencies, concerned mainly with economic return and only secondarily with human values or environmental needs? Or will there be a more widespread recognition of the need to promote leisure as a significant social concern, with programming that enhances physical fitness, creative enrichment, mental health, and other positive social values? Obviously, our priority must be to blend all aspects of the park and recreation movement together in an imaginative, innovative, and efficient enterprise that will make leisure a source for human betterment, rather than simply a vacuum that must be filled, or a product that must be sold.

To be successful in this effort, we will need practitioners who can bring a high level of professional competence and theoretical understanding to the task. This is the exciting and challenging assignment facing our college and university park and recreation curricula today.

Professor Richard Kraus is Chairperson of the Department of Recreation and Leisure Studies at Temple University (PA). Professor Delores Williams is a colleague in the same Department.

Time for Change

by Karen Drucker

Some people feel that the best thing about recreation education is its effort toward promoting the generalist. One is called upon to perform so many different roles with a variety of groups in numerous situations that one must know a little bit about everything!

Conversely, this also can be the worst factor. In knowing a little of everything, one may end up being a specialist in nothing. And while the good generalist is valued, today's recreation job conditions require more specialist training in a number of areas.

More Specialist Training Needed in Critical Areas

For example, this is the age of accountability. Yet how many park and recreation students have had a basic course in economics or finance? How many can prepare a budget? Analyze a computer printout?

Unfortunately, very few. However, it is imperative for the prospective park and recreation employee to acquire such skills if he or she is to be effective.

The computer has unlimited potential for use in our field, from scheduling and programming to resource identification and mapping. If college-trained personnel are not experienced in its applicability, however, it is unlikely that utilization of the computer will be encouraged.

In outdoor recreation resource management and planning, computer maps are a vital tool, as is the ability to justify alternatives through benefit/cost analysis or some other financial method. Yet, many graduates presently are searching for jobs with virtually no experience in these areas.

Specialized training, likewise, is needed in statistical measurement. For a solid statistics background is the first step toward solving what presently seems to be an insurmountable problem in our field—the lack of quality research.

Judging from the training given masters and doctoral recreation candidates, it is doubtful that they will have sufficient statistical background to undertake that quality, independent research which is so

badly needed. Before such an academic degree as Doctor of Philosophy is awarded in recreation, far more emphasis should be placed on designing, implementing, conducting, and analyzing independent research.

This lack of research, plus the difficulty of locating existing relevant material, causes much frustration for today's student. Some document of collected research in the leisure services field, indexed by specific subjects, would be extremely helpful.

Relevant research need not come only from people in the leisure field per se. Much excellent and relevant data exists in sociology, psychology, anthropology, and other social sciences. The knowledge and expertise available in these fields should be better utilized by people in recreation.

Increasing Linkages with Related Fields—and Other Nations

How will recreation students get this necessary specialized training . . . in economics and finance, computer science, statistics, and research?

As money becomes less available, people in the social services will have to become more aware of and involved in other related fields. One way to facilitate this is to have students take courses outside the recreation department.

What better place to take statistics than in the math department? Research courses are offered in almost every subject, with sociology and education containing information particularly applicable to recreation. One can gain the knowledge and expertise of related fields only by exposure. Why not provide this exposure while giving students the specialized training they need for recreation jobs in the 1980s?

Such cross-fertilization of ideas is extremely important for the well-rounded education of today's recreation students.

We need to be aware of what is going on in the leisure field in Europe, which is far more advanced than the United States. We also need to share our existing knowledge with the third world nations. For instance, the Special Olympics, which began in the United States in 1968, now has spread to more than forty-one countries. Many developing nations are realizing the need for professional recreation personnel. Yet few of our universities offer or encourage international preparation.

I believe that the time for change in these directions is long overdue. And I feel that our universities should become the innovators of these changes rather than the last to adjust to them.

First Steps Evident

There are signs of progress. Many major universities are attempting to keep up with trends in the field by offering courses in Tourism and Commercialism. Field work and internships usually are required on the undergraduate level and certainly encouraged on the graduate level.

At the University of Maryland, for instance, resource management courses are offered in the White Mountains of New Hampshire working directly with the U.S. Forest Service. Many other college curricula have instituted similar programs believing that practical, firsthand experience in the field is invaluable. As with anything, there is no better way to learn about resource management and recreation than to get out and actually do it!

Paul Miko, an intern at HCRS while completing his doctorate in Therapeutic Recreation, thinks that the best thing about recreation education is that it draws people from a wide variety of social services. Therefore, one is exposed to different approaches, expertise, and ideas. Students thus benefit not only from the professor's knowledge, but also from the firsthand experiences of others in the class.

Miko suggests that the community be brought into the classroom more extensively to further increase this broad exposure of students. Bring in the community organizer, the recreation leader, the facility planner. Use the classroom as a community forum and let students learn how to work within the community to meet its needs.

Karen Drucker sees a need for more specialized training in economics and finance, computer science, statistics, and research methods.

Personal Data

In closing, let me note that the above observations and suggestions are offered from the perspective of a committed graduate student. My undergraduate education was in economics at the University of Virginia. I then worked in management for a large bank before entering graduate school.

My particular interest lies in outdoor recreation rehabilitation programs for juvenile delinquents and I plan to do my thesis in this area. Eventually, I would like to design and implement a program of my own, possibly involving a long-term, low-intensity wilderness challenge course with a follow-up group resembling the Boy Scouts or 4-H Club.

Karen Drucker is completing her graduate work at the University of Maryland. She has served as an Intern in the HCRS Division of Park and Recreation Technical Services (PARTS) and as an Environmental Protection Specialist in the Northeast Regional Office of the National Park Service.

Reaching Out to High-Risk Youth

by Robert Peterson

Editor's note. Park and recreation workers in inner-city areas often must devise innovative ways of reaching out to meet the needs of troubled people—people plagued by lack of education, unemployment, hunger, and poverty; people devoid of hope and turned off by a society that seems to offer them very little.

Robert Peterson, Supervisor of the Albuquerque Parks and Recreation Department's Youth Service Agency, works with people like this, the city's hard-core disadvantaged youth. Here Bob describes the unique program developed by his agency, a program which constantly challenges the park and recreation employees, but which is showing positive results.

The Youth Service Agency uses recreation as a tool, reaching out to facilitate high-risk youth where they congregate. Robert Peterson

Albuquerque's Youth Service Agency naturally evolved from the city's earlier Roving Leader Program. The initial intent of the Roving Leader Program was to send park and recreation staff into low-income areas that were labeled "hot spots" by the police department and to use the medium of recreation as a tool, operating under the outreach concept. That concept involves reaching out to facilitate youth where they congregate, especially "high-risk" youth who will not respond to ordinary social programs and services.

Through working in various communities, our Roving Leaders eventually identified certain problems which seemed more prevalent in depressed neighborhoods. Our workers' direct contact with the young people also showed them on a firsthand basis what these youth needed and wanted. As a positive rapport developed, the young people and the outreach workers were able to discuss possibilities and to determine together what was realistic and unrealistic to attempt. Establishing this type of rapport is crucial to programs such as this—both in terms of referring people with particular problems to appropriate sources of help and in terms of the youth trusting and believing in the outreach workers' advice.

As direct contacts with the city's disadvantaged young people further developed, the Roving Leader staff felt the time was ripe to expand efforts to meet their clients' complex needs through a new program, initiated and implemented by the Parks and Recreation Department. Thus, after three years, the Roving Leader Program evolved into the Youth Service Agency, broadening the original outreach concept and bringing some innovative programming to the Albuquerque area.

The Youth Service Agency is organized into various sections. Each section approaches youth somewhat differently, but all work toward the common goal of providing proper guidance and direction for young people who are experiencing difficulties. We have discovered that such specialization achieves greater impact on our community needs and problems.

Youth Service programs deal specifically with "high-risk" or "hard-core disadvantaged" youth. We define this as a youth who (1) is between the ages of 14 and 20 years of age, (2) is a school dropout, (3) is exhibiting a poly-drug problem, and (4) is having difficulty with the courts, schools, or family.

Staff Sensitivities and Program Linkages

Every member of our staff is trained to recognize patterns that exist within low socio-economic communities, and to offer alternatives that may help break the prevailing defeatist attitudes that have permeated these communities for generations.

One factor our workers are sensitive to is the one-parent household. With today's staggering divorce rate and the growth of one-parent households, many youth are deprived of a certain necessary discipline and direction from their parents. Our Youth Service outreach workers try to arrange a meeting with each program participant's parent, parents, or guardian. At that meeting, they view the home environment and try to assess the concern of the parent, parents, or guardian. Hopefully, this increases their insight into specific problems the young person may be facing.

Our workers also are trained to recognize when a youth's needs are beyond the expertise of our department. Such a youth immediately is referred to an appropriate person or resource for help.

One important pitfall that many outreach programs encounter involves the hiring of unskilled personnel from the group or community that the program is trying to reach. We have learned from ex-

A variety of extracurricular activities are offered as an alternative to help the youth make better use of leisure time. Robert Peterson

perience that hiring staff from the background and sensitivities of our communities can be advantageous only if those staff members have the necessary education and experience, a constructive value system, and a good working knowledge of the street to assist in establishing a positive rapport with this special population.

If the potential employee does not have these necessary tools, hiring him or her often can do more harm than good. A person who has been brought up experiencing the same difficulties as the peers he or she now is trying to help often has trouble recognizing and dealing effectively with certain problems; he or she doesn't see them as problems but as a normal way of life.

To increase its effectiveness, the Youth Service Agency coordinates and cooperates with different divisions within the Parks and Recreation Department, as well as with other agencies such as those concerned with education, mental health, and corrections. This linkage is essential in terms of implementing well rounded programs for our clients. The major programs of our agency include the following.

Phase I Program

The Youth Service's Phase I Program grew from an experiment conducted by the Youth Service Agency and the Bernalillo County Mental Health Center (B.C.M.H.C.) Drug Counseling services during the summer of 1978. The two agencies combined forces to deliver a recreation and counseling program to a group of drug-abusing youth from the Albuquerque barrios who chose aerosol paint sprays as their agent for getting "high."

After careful consideration, the Youth Service Agency decided to re-implement this program with some modifications, coordinating it with the agency's Phase III Drug Abuse Treatment Program, B.C.M.H.C. Drug Counseling Services, and the Juvenile Judicial System. Rather than limiting the program to inhalant abusers, it was opened to individuals experiencing various poly-drug problems.

The Phase I Program services its youth through aerobic fitness training, recreational activities, nutritional guidance, weekly counseling sessions, and job placement assistance. All participants must meet our "high-risk youth" criteria, mentioned above.

Through the medium of physical conditioning, we hope to motivate or remotivate these youth back to a basic philosophy of "sound body, sound mind." Fitness and recreational activities are complemented by sessions with a B.C.M.H.C. Drug Counseling team. A counselor meets with the participants weekly on a one-to-one or group level to provide therapy. We try to establish a high level of self-esteem through this combination of recreation, counseling, and goal orientation.

Our coordination with the Juvenile Probation and Judicial System offers an alternative to many youth who have gotten into trouble with the law and who meet our "high-risk" criteria. Juvenile authorities have been assigning youth on probation to Phase I for the duration of their probation.

Finally, by instilling a basic understanding of nutrition and by providing individual employment counseling, we try to enhance the participant's chances of getting back into the mainstream of society. A staff member is assigned to scout the job market for possible job placement after a youth completes two months in the program. If a youth is placed, and the job does not work out, he or she is given the opportunity to return to the program and start again, as opposed to returning to the street.

Through special programs the young people develop a better self-image. Robert Peterson

Phase III Job Training Program

A typical participant in the Phase III Job Training Program will exhibit at least five of the following characteristics:

1. Between 16 and 21 years of age
2. Office of Comprehensive Employment and Training Administration (OCETA) eligible
3. Drug abuser (all types)
4. High school dropout
5. Reading below a fifth grade level
6. On probation or parole with the Juvenile Justice System
7. Rejected by family
8. From single parent household
9. Attitude problems that act as barriers to employment

Once a participant is referred to the program, the following is done step by step:

1. The youth is certified as to OCETA eligibility.
2. Once the youth is found OCETA eligible, he or she is enrolled in Phase III and tested by the Wide Range Achievement Test (WRAT) to determine academic strengths and weaknesses.
3. After academic strength is evaluated, participant is assigned to either the Special Education or General Education preparation unit. Individuals participate in these units for 15 hours of their work week.
4. The other 15 hours are devoted to work site activities which consist primarily of training in furniture making and woodworking. All participants are involved in these activities.

One major problem of these young people is a misuse of leisure time. Youth Service workers counter this by offering a variety of extracurricular activities ranging from inter-office competitions such as dart tournaments and basketball games to weekend camping trips. Participants also are encouraged to take part in recreational activities outside the Youth Service domain. To date we've been able to get our participants involved in city league teams in the traditional sports as well as soccer and rugby teams.

The Youth Service Agency believes that the total character development, which can result in self-actualization, must be nurtured in a supportive environment that pays attention to the education, recreation, and personal needs of the individual. This is what the Phase III Program attempts to do. Once a participant is considered ready to leave the program (after putting in 18 months or getting a passing score on the General Education test), he or she is assessed as to job readiness and is placed in either subsidized or unsubsidized employment.

Mobile Unit Program

The Youth Service's Mobile Unit Program includes a Movie Bus, Funsation Mobile, and Action Mobile. The Movie Bus offers a variety of films which are all "G" rated, as well as educational and cultural films. The bus travels throughout the city year-round, providing entertainment to various communities.

The Funsation Mobile contains a portable stage and a puppet stage. Disco dances, theatrical plays, and many other arts-in-the-parks groups perform in a number of sites.

The Action Mobile contains recreational equipment which is set up in various neighborhoods. Everything from ping-pong tables to arts and crafts supplies is brought to areas lacking recreational facilities.

Besides providing needed and beneficial entertainment, the mobile units funnel information back to Youth Services regarding areas and communities that might be in need of more intensive programs. Reaching many parts of the city, the units also help us develop informal networks of referrals.

Other Activities Foster Self-Pride

Youth Service also provides leagues and tournaments for "high-risk" youth based on seasonally appropriate sports. We sponsor special events at the Albuquerque Civic Auditorium, such as Low Rider car shows, concerts, and dances. We have implemented special cultural programs to help develop community and ethnic pride so that communities will pull together for the common betterment of their people and facilities.

Perhaps our biggest challenges are making sure our programs are as productive as possible and keeping in touch with the needs and trends of our various communities.

To close on a personal note, I chose my field and my specific line of work because I always have been interested in both recreation and helping troubled youth. Having grown up myself in low-income and poverty neighborhoods in New York, I realize how hard it is for youth today to adjust to their surroundings and to the pressures put on them by a society that demands excellence.

What I find most personally rewarding as Supervisor of the Youth Service Agency is watching a young person get involved in one of our programs and gradually exhibit a positive attitude adjustment with the realization that there is a place for him or her in our society after all.

Robert Peterson is Supervisor of the City of Albuquerque (NM) Parks and Recreation Department's Youth Service Agency.

Guide to the Governmental Job Market

by Kevin Coyle and Carl Friedrich

The parks and recreation field is dynamic, and as each year passes, it reaches new levels of professionalism. If this is your chosen field, now is a difficult time to seek employment. Yet there is much you can do to make yourself more attractive in the governmental job market. We offer the following advice to help you gain a competitive edge in searching for a job within the public parks and recreation field.

Know the Basics

In searching for jobs, the person who knows the fundamentals of preparing a good resume, interview techniques, and various other skills will stand a better chance of success. Numerous guidebooks on these topics are available.

Virtually every college and university has a placement office which can provide general guidance and information on jobs and job-seeking. Similarly, public libraries and many employment offices are good sources of information. Use these sources as aids in learning the basics.

Can You Make a Contribution to a Park and Recreation Agency with a Diminishing Budget?

Parks and recreation officials are looking for people who will be an asset in running quality programs and providing services under limited or reduced budgets.

Much information is being developed and circulated that can help officials cope with these financial problems. Knowledge of a number of these "coping" approaches will strengthen your candidacy. Here are some topic areas with which you should be familiar:

- Gift Catalogs
- Volunteer Programs
- CETA Reauthorization
- Budget Justifications
- Grants-in-Aid and Federal Programs
- Land Acquisition and Preservation Techniques
- Other Private Fundraising Techniques

The Heritage Conservation and Recreation Service (HCRS) recently prepared a number of self-guiding reports and manuals on these topics. To obtain these, contact: Heritage Conservation and Recreation Service, Information Exchange, 440 G Street, NW, Washington, DC 20243.

In addition, both the National Recreation and Park Association (NRPA) and the American Alliance for Health, Physical Education and Recreation (AAHPER) have a broad repertoire of helpful publications which are distributed at cost to interested individuals. See below for more information on these organizations and how to contact them.

There is more to developing a competitive edge in the job market than simply being aware of current topic areas. Experience, more than any other single qualification, will increase your employability.

For the student, internships, volunteer work, and summer jobs are all good ways of gaining relevant park and recreation experience. For the person seeking advancement, participation in continuing education, intergovernmental personnel exchanges, professional meetings, and special training opportunities will enhance your qualifications in the eyes of an employer.

Federal Job Information

The following publications can help you locate job opportunities within the federal government:

- *The United States Government Manual* describes the purposes and programs of most government agencies and lists key officials. Copies are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Price $6.50, stock no. 022-003-00948-5.
- *The Federal Yellow Book*, a loose-leaf directory of the federal departments and agencies, includes names, titles, addresses, rooms, and phone numbers of the 27,000 principal federal employees. For purchase information, contact: The Washington Monitor, 499 National Press Building, Washington, DC 20045. Or phone (202) 347-7757.
- *The Federal Employment Outlook* (BRE-74), a quarterly publication, not only summarizes the best opportunities in all fields, but covers both nationally and locally publicized examinations which are required for many federal jobs.
- The *Federal Research Service* offers by subscription a weekly listing of currently advertised federal jobs as well as some state and local jobs. Each issue also provides tips on making yourself more competitive in the federal job market. A six issue subscription is available for $18. Subscription information may be obtained by writing the Federal Research Service, 370 Maple Avenue, Vienna, Virginia, or by calling (703) 281-0200.

NRPA also has a publication on federal jobs as part of its EMPLOY series. In addition, there are many guides for preparing the Standard Form 171 (SF171), which is the application for federal employment.

These information sources often are available in libraries or placement centers. The Department of the Interior also has a recorded job vacancy listing which is available by calling (202) 343-2154. This listing is updated weekly.

Federal Registers

Two of the more common employment registers maintained by the federal government are the PACE register and the Mid-level register. Hiring for most federal jobs (permanent and temporary) requires that you first be listed on one of these two registers.

The PACE (Professional and Administrative Career Examination) is a three-hour written test which is the principal means of entry into federal service for liberal arts and general business graduates at the GS-5 and GS-7 levels. It also is open to all other academic majors and to applicants with equivalent experience. Each year, about 7,000 placements are made from this examination in more than 100 different kinds of jobs.

The PACE exam is scheduled only at certain times of the year and you must apply to take the test at least 30 days before it is given. It will be between one and two months before you get your score and are listed on the register. It is essential to get a very high score in the PACE exam because of the extremely competitive nature of the federal job market. Accordingly, it pays to obtain and use a guidebook on preparing for the exam. These are available in most book stores.

The main route to employment for graduate degree holders or those with several years of professional experience is the Mid-level register at the GS-9/11/12 levels. This register covers such fields as personnel management, financial management, economics, general administration, public information, and social science analysis. No examination is necessary for you to get on this register. To apply, contact the Federal Job Information Center closest to you.

State Government Employment

If you are interested in park and recreation jobs within state agencies, there are many directories that can provide you with contacts. One particularly good publication is the *Conservation Directory*, available for $4 from The National Wildlife Federation, 1412 Sixteenth Street, NW, Washington, DC 20036, (202) 797-6800. This directory lists contacts under each state government agency, as well as many other conservation-oriented organizations.

You can also contact the Governor's Office in your state for an office or telephone listing as well as the state government organization chart. Be advised that most states have Civil Service Commissions and require entrance examinations which also are highly competitive.

Other Sources of Job Information

The National Recreation and Park Association (NRPA) is a leader in providing job information in the parks and recreation field. NRPA has several publications available. For example, there is EMPLOY, an information bulletin series about how to locate job opportunities as well as "The Job Bulletin," a bi-monthly publication that advertises job vacancies in the parks and recreation field. As noted above, NRPA has numerous other helpful publications which you may use in preparing yourself for a job. For more information, contact the National Recreation and Park Association, 1601 North Kent Street, Arlington, Virginia 22209, (703) 525-0606.

In addition, the State Park and Recreation Societies (which are affiliated with NRPA) may be able to provide you with valuable information. You can contact NRPA for the addresses of these state societies.

The American Alliance for Health, Physical Education and Recreation (AAHPER) also offers much useful information for the job seeker and recreation professional through its affiliate, The American Association for Leisure and Recreation. For instance, the April 1979 issue of *Leisure Today* contains a series of articles dealing with "Careers in Leisure and Recreation." Contact the American Alliance for Health, Physical Education and Recreation, 1201 16th Street, NW, Washington, DC 20036, (202) 833-5541.

Also consider other organizations in the field, for they also may be able to provide job information. For example, the National Industrial Recreation Association, 20 North Wacker Drive, Chicago, Illinois 60606, (312) 346-7575, represents private employer-operated recreation programs.

Getting Organized

Researching all the ideas suggested here will take substantial time. A good way to reduce this time factor is to start a student or professional group. Recruit students or fellow employees who have similar career interests and assign each member a specific task. The benefit is that each member will have access to a large amount of job information while sacrificing only a small amount of time. You also can share the expenses.

During your research, be sure to review thoroughly all the materials provided by your placement office, library, or employment office. They not only can furnish you with new ideas, they can save you a lot of legwork as well. If an active professional student or work organization already exists, be sure to use it well. Existing student or professional organizations can reinforce their commitment to career development through maintenance of a career information file and other up-to-date sources of information.

Keep in mind that it requires patience, determination, and money to find a good job. Be sure to set aside the time and funds to do it properly. We hope the hints in this article will open some doors for you. They will not give you all the answers you need to land a good job, but they can point the way to help.

This article was reprinted from Technical Note *#2 published by The HCRS Information Exchange. Kevin Coyle and Carl Friedrich are with the HCRS Northeast Regional Office in Philadelphia, Pennsylvania.*

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NRPA Employment Services

by Donald Henckel

The National Recreation and Park Association is the nation's largest nonprofit service, research, and education organization dedicated to improving the quality of life through effective utilization of natural and human resources. Implicit in this purpose is well trained, highly qualified leadership. Personnel employed in the field of parks, recreation, and leisure services work with all age groups from the very young to the aged; from the rich, through the middle class, to the poor; the easy-to-reach and those who have tuned out society; the sick and the well; the emotionally and physically handicapped. Employment settings range from wilderness to rural to suburban and urban, including the inner city. Jobs can be found in municipal, county, special district, state, and federal tax-supported agencies; voluntary youth service organizations; commercial enterprises; public and private institutions; and colleges and universities. The scope of the field is increasing and unlimited.

The *need* for trained park, recreation, and leisure service personnel is expanding rapidly as more people seek recreational experiences; as the number of older people using senior centers and nursing homes increases; as the demand for campsites, lakes, streams, trails, and picnic areas grows; as the need for creative expression in the arts and humanities magnifies; as people seek wholesome avenues of stress reduction; as the citizen's understanding of meaningful use of leisure deepens; and stewardship of our natural resources gains greater acceptance.

But the need for trained park and recreation personnel does not necessarily reflect *actual employment opportunities*. Public funds, especially, are not keeping pace with the needs. Inflation impacts all elements of the economy. The number of park and recreation curricula and students has increased dramatically over the past decade. Competition for jobs is stiff.

Preserving and maintaining statues and monuments requires precision and skill. Richard Kraus

In this environment, the National Recreation and Park Association offers a variety of career guidance and employment assistance services.

Career Information

Annually, NRPA receives thousands of requests for information about the field of parks and recreation from high school juniors and seniors, guidance counselors, parents, and teachers. "Service to Humanity," a small brochure sent to these individuals, provides a brief overview of the field.

Since many are interested in pursuing higher education, an order form is included for the *Curriculum Catalog*. This publication provides detailed information on over 100 park and recreation curricula throughout the United States and Canada. A more detailed brochure, titled "Careers in Parks, Recreation and Leisure Services," also is available. Material in this brochure originally was developed for, and now is used in, the Department of Labor's *Occupational Outlook*.

Employment Assistance

The "Park and Recreation Opportunities Job Bulletin" is published twice monthly and is available to all NRPA members who pay an additional annual fee of $15.00. It lists a broad variety of jobs throughout the United States and some foreign countries. Examples of recent job listings include:

- Director of Parks and Recreation in Tacoma, Washington—$35,000 salary
- Director-Secretary of the Cleveland, Ohio Metropolitan Park District—$36,000 to $51,000 salary
- Park Manager III in Phoenix, Arizona
- Park Naturalist, St. Petersburg, Florida
- Director of Red Cross Safety Service in Des Plaines, Illinois
- Sports Consultant for the Holly Shores Girl Scout Council in Woodstown, New Jersey
- Ice Rink Manager in Boulder, Colorado

Voluntary agencies are a growing source of jobs for park and recreation practitioners. Thomas Joy

- Graduate Assistant and Intramural Coordinator in Hempstead, New York
- Therapeutic Recreation Leader at the Clinton Convalescent Center in Clinton, Maryland
- Park and Recreation Training Administrator for the Heritage Conservation and Recreation Service
- Camp Counselor in Farrettsburg, Pennsylvania
- Instructor or Assistant Professor at Central Michigan University
- Playground Supervisor/Recreation Intern in Barrington, Rhode Island

The EMPLOY publication is published monthly, September through May, and is another NRPA service designed to help individuals prepare for their job search. It focuses on both traditional and nontraditional employment settings and is available on an individual or agency subscription basis. Each issue provides practical information on a different employment setting such as senior centers, apartment complex recreation, Boys' and Girls' Clubs, college unions, therapeutic recreation, VISTA and the Peace Corps, community education, Federal Civil Service, state park employment opportunities, U.S.O. clubs, correctional institutions, employment for ethnic minorities, industrial recreation, leisure counseling, therapeutic wilderness camping, wildlife conservation, international work/study programs for recreation students, armed forces recreation, and others.

The EMPLOY publication series also provides practical tips on job hunting. *Preparing for the Job Search*, which originally appeared in EMPLOY, now has been produced as a special publication. It outlines concisely how to evaluate one's employment potential for a given job, write an effective resume and cover letter, and prepare for interviews. It also provides additional resource information.

Conference Professional Job Marts and Resource Assistance

Additionally, each year NRPA provides a job mart at its national Congress. Over 200 jobs normally are listed. Direct interviews are arranged for employers desiring such service. NRPA also provides assistance to regional and state conferences for organizing similar job marts.

NRPA is involved in a broad array of activity directly or indirectly related to employment and personnel qualifications. Among these:

- NRPA conducts an accreditation program for baccalaureate and masters degree park and recreation programs designed to improve the quality of professional preparation.
- National registration/certification programs prescribe recommended standards for practitioners.
- The publication, *National Personnel Guidelines for Park, Recreation, and Leisure Service Positions* provides recommended job descriptions, for all major park and recreation positions.

As more people discover the value of productive leisure activity, the need for trained park and recreation professionals grows. George Gerdis

Therapeutic recreationists can produce demonstrable changes in the outlook and abilities of handicapped people. Gene Young

- Manpower studies have been conducted for public park and recreation agencies at the local, state, and federal levels.
- Every two years, surveys are conducted to ascertain the number and characteristics of park and recreation curricula, students, and faculty.
- NRPA's National Personnel Advisory Committee recently completed guidelines which assist state groups in developing employment assistance. This same committee now is conducting extensive investigations of the commercial recreation market.
- A major job analysis project currently is underway to determine more precisely the functions performed by park and recreation personnel.
- The association is heavily involved in legislative activity impacting on programs and funds available for employment in parks and recreation.
- NRPA is deeply involved in attempting to upgrade the park and recreation federal Civil Service series.
- A new study by NRPA will evaluate and delineate effective CETA (Comprehensive Employment and Training Act) programs operated by park and recreation agencies. The study is in cooperation with the Department of Labor and the Heritage Conservation and Recreation Service (HCRS).

Through the above services and projects, the National Recreation and Park Association plays a vital national role in:

- Career guidance
- Identifying jobs for park and recreation personnel
- Assisting employers in securing qualified personnel
- Developing employment potential in non-traditional leisure service markets
- Setting national standards for professional preparation and practice
- Conducting studies relating to formal preparation programs and employment
- Influencing job qualification for positions at the local, state, and federal levels
- Legislation impacting on employment funding.

Further information about these and other services may be obtained by writing the Division of Professional Services, National Recreation and Park Association, 1601 N. Kent Street, Arlington, Virginia 22209.

Donald Henckel is Director of the Division of Professional Services in the National Recreation and Park Association.

Feedback Sheet

1. How has this issue of **Trends** been helpful to you?

2. Are there any particular topics or themes you would like to see addressed in future issues of **Trends**?

3. Have you any additional comments or suggestions regarding **Trends**?

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Contents

Trends in Vegetation Management

2 **Introduction**
by Mai Liis Bartling

6 **Choosing Appropriate Vegetation**
by Charles M. Sacamano, Ph.D.
Guidelines and suggestions

11 **Managing Urban Forests for Recreation**
by John F. Dwyer
Challenges and options

15 **Breeding Better Trees for People**
by Frank S. Santamour, Jr., Ph.D.
Current research at the U.S. National Arboretum

20 **Plan Before You Plant**
by Monty L. Christiansen
Procedures to facilitate low-cost vegetation management

23 **Integrated Pest Management**
by William and Helga Olkowski
A successful system of control

27 **IPM in Modesto**
A case study

28 **Recreation Opportunity Spectrum: A New Management Concept**
by Thomas A. Hoots and Leon J. Buist
Implications for vegetation management

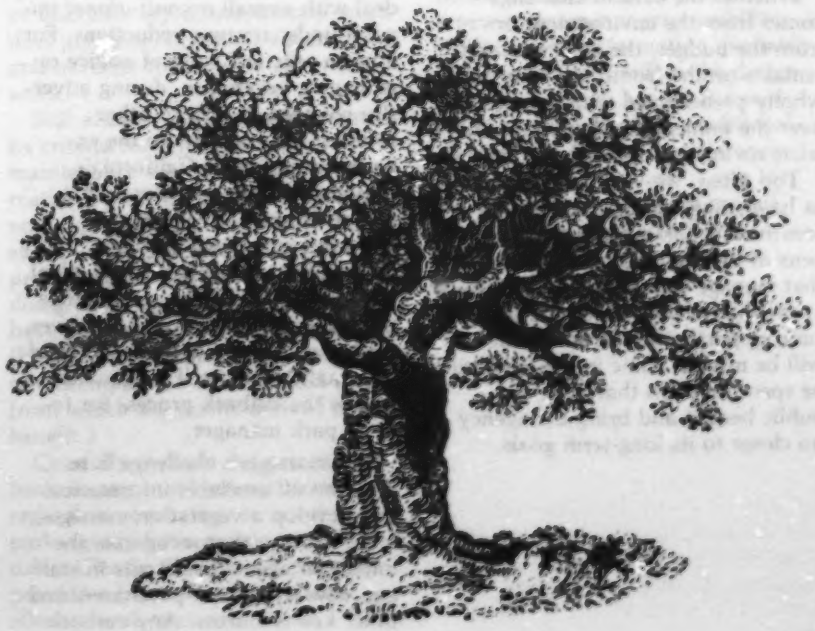
32 **How to Start a Street Tree Program**
by Richard D. Marling
Step-by-step pointers

36 **Managing Recreational Fields of Turfgrass**
by John R. Street
Tips on selecting and cultivating turfgrass to withstand heavy use

42 **Evolution of a Policy for Vegetation Management**
by John Nicoles
Case study: East Bay Regional Park District

45 **Vegetation Fire Control at East Bay**
Principles and Policy

47 **Feedback Sheet**



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The information presented in any of the publications of Park Practice does not reflect an endorsement by the agencies sponsoring the program or the editors.

Articles, suggestions, ideas and comments are invited and should be sent to Park Practice, U.S. Department of the Interior, Heritage Conservation and Recreation Service, 440 G Street, NW Washington, DC 20243.

Introduction

by Mai Lin Bartling

The challenges to park management come from many sides. Each year brings sudden or cyclic environmental stresses to complicate the already complex job of protecting both the natural resource and the taxpayer investment while responding to the day-to-day needs of the park visitor.

Today's park manager is faced with additional uncertainties. State and local taxing and spending limitations have imposed a fiscal drought. Even where park agency budgets have not taken actual cuts, the ever higher costs of energy, water, and labor have made fewer real dollars available. In many agencies, experienced staff have left out of frustration, and morale sags among those who remain (who may have time for little more than picking up litter or scrubbing graffiti off walls). And all this at a time when many park agencies should be reinvesting in the rehabilitation of a deteriorated physical plant.

Whether the current challenge comes from the environment or from the budget, the park manager remains on the frontlines, sometimes wholly preoccupied with smoothing over the immediate, short-term impacts on agency operations.

Too often, we view management as happening behind the desk, as somehow separate from what happens in the field. Those agencies that manage change with expertise know that when this separation occurs, opportunities for innovation will be missed. Time in the field will be spent on tasks that have no public benefit and bring the agency no closer to its long-term goals.

We miss a crucial point, too, if we view management as merely the day-to-day reacting to situations. Amidst today's rapid change, only an active and well-focused management strategy can succeed.

There are good reasons to focus on the management of park vegetation during the present cutback era. We can be sure that despite the reduced funding to public agencies, the public will continue to look to parks not only as a place to actively recreate, but as a place to seek refuge from the visual blight of so many urban areas.

Just as important, the cutback process itself needs to be thoughtfully modified to suit a living and biologically sensitive system. While clearly part of overall park operations, vegetation management raises additional issues.

The last few years have seen the development of a body of literature—directed primarily at the public agency administrator—to deal with overall *organizational* impacts under revenue reductions. For a more practical form of advice on managing *vegetation* during adversity we need to turn to other sources, for example, to the experience gained by California's drought-stricken agencies. (That 3-year drought put landscape managers on a "water budget"; they learned to stop overwatering, plant less thirsty vegetation, and change their irrigation practices.) However, neither of the above two sources of information, by itself, adequately frames the cutback process for today's park manager.

The manager's challenge is to draw on *all* available information and develop a vegetation management strategy that recognizes the impact of agency-wide cuts in staffing, new equipment purchases, and other key resources. Any cutback management strategy will need to come to grips, too, with such intangibles as a changed organization and unsettled staff.

Sobering Challenges Present Soaring Opportunities

Three components seem essential to formulating an active management strategy capable of dealing with revenue and resource reductions:

1) Look at the total picture.
2) Set priorities and clear goals.
3) Devise effective plans of action for reaching those goals.

If we think in these terms, we are sure to spot opportunities for cost-saving innovation, while avoiding such serious mistakes as unplanned or indiscriminate service cuts, false economies (and down-the-road costs), and inefficient, across-the-board measures.

Step 1: See the Total Picture

When we focus on park vegetation, the "total picture" is complex. Just as the "whole is more than the sum of the parts," no physical inventory of the facilities to be maintained or the tasks to be done tells the whole story. The management of park vegetation is intertwined with at least three interactive systems.

To make intelligent, balanced cuts means coming to grips with these three perspectives:

1) The park as a natural resource and habitat for wildlife, with its own internal workings.
2) The park as a site for recreation, where recreator needs and ease of maintenance do not always coincide.
3) The park as a city or county property and investment, its health inseparable from the workings of local government.

Agencies need to plan ahead for a service cut or transfer of responsibility. Indiscriminately made cuts quickly will bring the agency to the realization that every action has a reaction against which the action must be weighed. *Both* the addition and the subtraction of services have their costs and benefits. Many agencies have observed, for example, that a visible decline in park maintenance often leads to increased litter and vandalism. Other agencies have found that replacing traditional vegetation with low maintenance plantings impacts user perceptions of a park and, therefore, the kind of use it receives.

Even if we consider only those economy measures that involve no service cut to the public, the picture is complex. For example, substituting equipment for labor raises energy costs and may require the agency to expand its repair capability. To avoid false economies, the agency needs to examine the *total* cost configuration when decisions are made to save money. The agency which is already able to accurately track its labor, energy, supply, and service costs has the advantage.

To see the whole picture means also to see the impact of decisions *over time*. Agencies should not mistake short-term transitions for long-term solutions, nor fail to make a necessary investment in their long-term health. While remote today, the cost of deferred maintenance will drain the agency in the years ahead. Already the deferred maintenance tab for the nation's campus grounds approaches one quarter of their current book value. Parks cannot be far behind.

Step 2: Set Priorities and Goals

Public agencies typically begin a cutback process with across-the-board cuts in programs and services. While politically safe, such a strategy often is inefficient. When resources are limited, it is more critical than ever to spend them where they count.

Setting priorities requires weighing the benefits of providing a service against the costs—both dollar and non-dollar—of not providing it. Budget cuts in California led one county park agency to reorder its priorities to:

1) risk management,
2) resource management (such as erosion control),
3) visitor services, and
4) facility maintenance (such as shrubs, turf).

Another smaller agency uses a set of criteria including safety, intensity of use, and interference with other needed operations, to classify specific tasks as to whether critical or discretionary. Discretionary work does get done, but less frequently and never at the expense of critical work.

Still another agency has combined its criteria for critically needed maintenance with community recreation priorities. The latter agency now has a rational framework for system-wide decisions which also provides the opportunity to "stop doing those things we never should have been doing in the first place." (Intensive shrub bed maintenance is one example of a discontinued task from which the public derived no benefit.)

Carefully thought out priorities are basic to any management strategy, regardless of whether or not the park agency faces revenue reductions. Clearly thought out priorities provide a framework for rational allocation of resources. When dollars are scarce, however, simply setting priorities cannot guarantee that all necessary work will get done. The park manager also will need to set the positive goal of identifying alternative means to achieve desired ends. The park manager should make it his or her *job* to tap outside resources while seeking new internal efficiencies.

In some agencies, only a *complete* rethinking of the current management strategy will do. This rethinking should ask some hard questions about the organization itself: Why do some organizations fare so well under the pressure of change, finding opportunities for cost-saving innovations everywhere? What processes and procedures can the agency establish to foster and support the innovative individual, thereby becoming an *innovative agency?*

The fostering of cost-saving innovations should become an *organizational goal.* One place to begin is to require a full maintenance assessment prior to assuming a new maintenance responsibility. With full cost information available while a project is still in the design stage, the agency has a basic tool for evaluating less than traditional alternatives. Ideally, a maintenance assessment will be based upon life-cycle costs, averaging the cost of routine maintenance with the cyclical costs of replacement and major work.

Today's challenge is to draw on all available information and develop a vegetation management strategy that maximizes your return on every dollar spent.

HCRS

There are other places to build institutional support for cost-saving innovation. In some communities, management salary increases are based on performance targets, which include percent reductions achieved in the use of water, natural gas, electricity, or gasoline. A periodic status report keeps the manager informed on his or her progress toward the target reduction. In this way, the manager has both the incentive and the information to innovate.

Step 3: Develop an Effective Plan of Action

There is at least one advantage to working within a complex subject area such as a park. Problems often can be tackled from a number of angles. While simple solutions are rare, opportunities for creative and comprehensive problem solving are many.

Asking the right questions is the first step in effective strategizing. With practice, we learn to fine tune our questions so that even when a particular cost-cutting idea does not appear directly transferable, we can learn the underlying lessons. Overall, our goal remains the best possible use of existing resources with a continuous tapping of new community resources to help meet critical needs.

What are some of the pieces of a comprehensive strategy for low-cost vegetation management? Two of the many questions that landscape managers should begin to ask themselves are:

1) When will our dollars go further by contracting with a private sector provider?
2) How can we best tap community-based groups?

Contract Landscape Maintenance

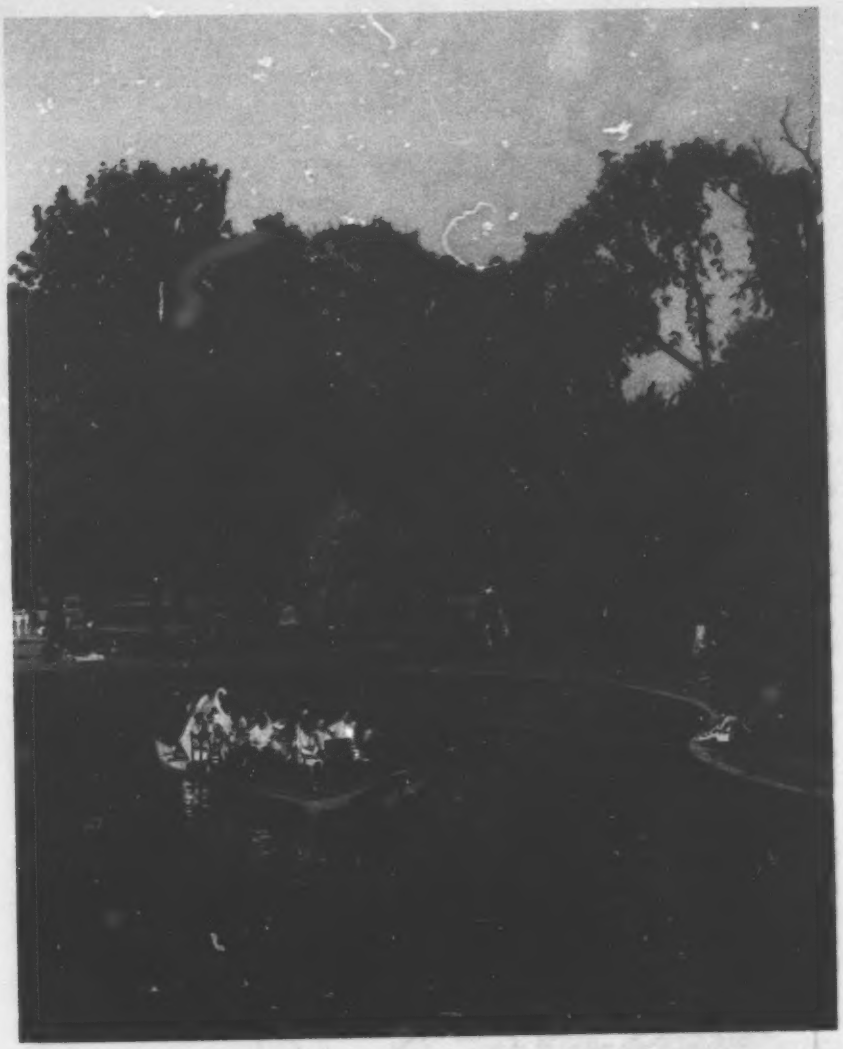
Talking about contract landscape maintenance is a little like talking about the weather. Much is said, but little is resolved. Recently, the focus has moved away from "should we or shouldn't we?" Managers today are asking: *When* is contracting cost effective? *What* specific measures can we take to minimize the risks and maximize the benefits?

There is little argument that successful contract agreements have many benefits. These may include costs savings, better budget control, minimum capital outlay, reduced personnel problems, superior equipment, greater flexibility to handle seasonal overloads, and so forth. However, when contract agreements are poorly conceived and not well monitored, there are risks: inferior workmanship, down-the-road costs, or loss of in-house backup capability. Even a genuinely satisfying contract relationship involves both staff time and paperwork to draw up, administer, and enforce.

If there is a single underlying lesson to be learned from the diversity of contract experiences, it is: Contracting is *not* a transfer of responsibility. From the start, the park manager must take an active role in managing the contract, identifying those contract opportunities where benefits are likely to outweigh risks.

Some rules of thumb include using landscape maintenance contractors:

1) To perform routine work that is easily measurable and has few unknowns, such as routine mowing.
2) To fill short-term needs or heavy seasonal requirements.
3) To cut travel and time costs for agency staff street tree trimming.
4) To assist where public contact is minimal.
5) To provide special skills and equipment or new technology where necessary.



Managers must consider parks both as a natural resource that provides wildlife habitat and as a site for recreation.

HCRS

Maintaining a highly manicured landscape is both expensive and time-consuming.

HCRS

Tapping Community Group Resources

Community groups also can be partners in a low-cost vegetation management program. The agency, however, must recognize and understand both the strengths *and* the limits of voluntary and community group assistance. Since a group's long-term stability or interest cannot be guaranteed, the agency and group together should set attainable goals. These goals should be mutually agreeable and preferably set out in writing.

Many agencies have found that the job of overseeing community group involvement is much easier if the community partner already shares agency goals. Soccer and other sports teams have a clear interest in turf maintenance, and some agencies have begun to tap that interest for assistance with routine tasks. In other communities, garden clubs have become enthusiastically involved in the more skilled aspects of landscape maintenance.

Finding a stable and interested community group is a first step. The park agency also must be willing and able to support such groups through:

1) Providing clear performance standards.
2) Agreeing to itself perform certain heavy work.
3) Making expertise and training available.

In New York City, for example, the parks department has been involved in a "citizen care" program, which tests and certifies private citizens to help maintain street trees. New York City recognizes that community involvement is *not* cost effective if the agency must come in and pick up the pieces.

Contract landscape maintenance and community involvement are but two components in an overall strategy to lower the cost of vegetation management. During this era of budget cuts, it is more important than ever that the manager actively seek out still other approaches. The agency that survives—even thrives—in this cutback era will emerge a model of carefully orchestrated imagination, sound management practices, and well deserved credit for wisely spent public tax dollars.

Mai Liis Bartling is an Outdoor Recreation Planner in the HCRS Pacific Southwest Regional Office, Division of Planning and Technical Assistance.

Choosing Appropriate Vegetation

by Charles M. Sacamano, Ph.D.

A systematic approach to plant selection for park and recreation area landscapes begins with the function plants are to perform. Trees, shrubs, and vines may be very striking or "low" maintenance, but if they aren't selected to do a specific job such as define space, provide shade or privacy, direct traffic, or integrate structure and site, the landscape can never achieve its purpose. Too often those of us who have a strong horticultural background tend to ignore this functional aspect of plant selection. We develop a personal fondness for certain trees and shrubs and neglect others that might be more effective in a given situation.

After the intended function or use of the plant is correlated with the design requirements, attention should be directed to the site's particular microclimate and soil. Air drainage, wind patterns, temperature extremes, rainfall, and light exposure may all influence plant selection. Topography and soil characteristics are equally important site considerations. Bottomland areas need trees and shrubs that are adapted to periodic flooding and poor soil aeration. In upland locations, plants that require fast soil drainage perform well.

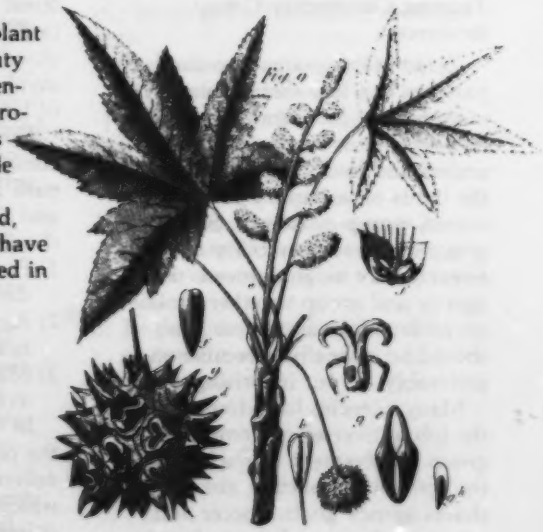
Soil pH cannot be overlooked if acid-loving plants or those species sensitive to iron chlorosis are possible landscape selections. Some plants actually look their best on poor, dry, infertile soils while others require a moist, organic, nutrient-rich soil environment. It's true that soil pH, drainage, and nutrient status can be modified to some extent, but in many parks and recreation areas it is far more practical to match plants with existing site conditions.

Mature size and shape seem obvious and very important considerations in the plant selection process. Still, it takes planning and foresight to project 10, 20, or 30 years into the future for a glimpse of how trees and shrubs will relate to one another and to the landscape as a whole. Avoid trees, shrubs, and conifers that are genetically destined to grow too large, assume the wrong shape, or look mutilated if they must be restrained. Slow growing, dwarf, and compact species and cultivars are preferable in many landscape locations.

Life span under local conditions is a key consideration in selecting landscape plants for parks and recreation areas. Everyone has seen attractive but poorly adapted trees or shrubs that struggle to survive for a few years and then must be removed and replaced. This can be costly in terms of time, budget, and energy. A good basic plant that is adapted and performing well is usually more satisfying than a plant that has potential for great beauty but, because it is in the wrong environment, ends up a sad and grotesque sight. This often happens when aesthetic decisions override functional use. Where a specific flowering tree or shrub is desired, select species and cultivars that have been proven hardy and long-lived in the area.

Plant litter is another area of concern. Cleanup of fruit, seedpods, flowers, nuts, twigs, and leaves makes large demands on manpower and equipment, especially when the litter is dropped over a long period of weeks or months. Most conifers do not require fall leaf removal, while some broadleaf evergreen trees shed leaves all year long.

In some parts of the country there is a real advantage to using deciduous trees which give summer shade and allow winter sunlight in. The ideal deciduous shade tree is one that drops its leaves quickly in autumn. Fall leaf cleanup then can be completed in one or two operations. When litter-producing trees are used and where space permits, retaining lower branches helps hide fallen debris. Another solution for some situations is to plant litter-absorbing groundcovers or shrubs under or in front of the trees.



Before planting such care-intensive features as rose gardens, flower beds, and clipped hedges, give careful thought to their maintenance requirements. To plant a rose, probably the most popular flowering plant in America, is to sign up for an exacting program of insect and disease control as well as pruning and fertilization. Concentrate such plantings in key areas where they can be managed efficiently rather than scattering them throughout the landscape. This fits well with the concept of zoning parks into areas of high and low maintenance based on function and location. The experienced landscape manager then takes care not to place plants needing high maintenance requirements in areas that are zoned for low maintenance.

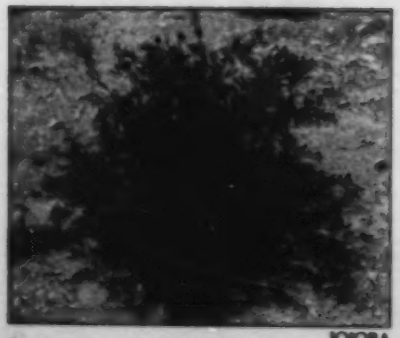
Insect pests and diseases create high maintenance situations that can be avoided to some extent by careful plant selection. Avoid using large numbers of plants susceptible to the same insect or disease. All plants also should be evaluated for such undesirable characteristics as poor branching habit, dense shade in turf areas, thorns, brittle wood, self-seeding, invasive roots, poisonous parts, and in some areas, allergy producing pollen.

Landscape use of native trees and shrubs is on the increase throughout the country, especially in the desert southwest. The reasons are not difficult to uncover. Native trees and shrubs and those from similar parts of the world require less maintenance because they are adapted to local climates and soils. Once established, their irrigation requirements are greatly reduced or entirely eliminated. Growing public interest in water conservation will give added emphasis to this point in the future. Generally speaking, the natives also have fewer insect and disease problems than introduced species of trees and shrubs.

Finally, native and non-native arid land plants have a special landscape charm and beauty. They may appear a bit sparse and open in a nursery compared to traditional high water-use plants, but once placed in the landscape they grow and flourish with far less care. Some examples of arid land trees and shrubs for landscape use in the desert southwest are shown on the accompanying chart. The lists are based primarily on availability from nursery sources.

MESQUITE, CHILEAN

PALO VERDE, BLUE



JOJOBA

Arid Land Plants for Landscape Use in the Desert Southwest

Photos provided by Charles M. Sacamano

Shade Trees

Over 30 feet	
Ash, Arizona*	*Fraxinus velutina*
Sycamore, Arizona*	*Platanus wrightii*
Cottonwood, Fremont*	*Populus fremontii*
20-30 feet	
Acacia, Sweet	*Acacia smallii and farnesiana*
Hackberry, Netleaf	*Celtis reticulata*
Palo Verde, Blue	*Cercidium floridum*
Palo Verde, Mexican	*Parkinsonia aculeata*
Mesquite, Chilean	*Prosopis chilensis*
Ironwood	*Olneya tesota*

Windbreaks and Screens

Palo Verde, Blue	*Cercidium floridum*
Cypress, Arizona*	*Cupressus arizonica*
Ironwood	*Olneya tesota*
Ebony, Texas*	*Pithecelobium flexicaula*
Mesquite, Chilean	*Prosopis chilensis*
Sugarbush*	*Rhus ovata*
Mountain Laurel, Texas*	*Sophora secundiflora*
Rosewood, Arizona*	*Vauquelinia californica*

Background and Space Definers

Above Eye Level	
Willow, Desert	*Chilopsis linearis*
Cypress, Arizona	*Cupressus arizonica*
Feather Bush*	*Lysiloma thornberi*
Ebony, Texas*	*Pithecelobium flexicaula*
Sugarbush	*Rhus ovata*
Rosewood, Arizona*	*Vauquelinia californica*
Waist to Eye Level	
Manzanita, Point-leaf*	*Arctostaphylos pungens*
Saltbush, Brewer	*Atriplex lentiformis 'breweri'*
Desert Broom	*Baccharis sarothroides*
Creosote Bush	*Larrea divaricata*
Texas Ranger	*Leucophyllum frutescens*
Hopbush*	*Dodonaea viscosa*
Jojoba	*Simmondsia chinensis*
Trumpet Bush, Yellow*	*Tecoma stans*
Knee to Waist Level	
Turpentine-bush	*Aplopapus lariculfolius*
Fairy Duster	*Calliandra eriophylla*
Indigo-bush*	*Dalea wislizeni*
Brittle-bush	*Encilia farinosa*

Groundcovers

Saltbush, Four-wing	*Atriplex canescens*
Saltbush, Australian	*Atriplex semibaccata*
Indigo-bush, Trailing*	*Dalea greggi*
Fairy Duster	*Calliandra eriophylla*
Daisy, Blackfoot*	*Melampodium leacanthum*
Evening Primrose, Mexican*	*Oenothera speciosa childsii*
Baja Primrose*	*Oenothera drummondii var. thalassaphila*
Rosemary, Dwarf*	*Rosemarinus officinalis 'Prostratus'*
Verbena	*Verbena sp.*
Trumpet, Hummingbird*	*Zauschneria latifolia*

Erosion Control

Saltbush, Australian	*Atriplex semibaccata*
Desert Broom	*Baccharis sarothroides*
Brittlebush	*Encilia farinosa*
Lovegrass, Lehmann	*Eragrostis lehmanniana*
Bursage, Triangle-leaf	*Franseria deltoidea*
Tree Tobacco	*Nicotiana flauca*
Fountain Grass	*Pennisetum setaceum*
Globe-Mallow	*Sphaeralcea spp.*

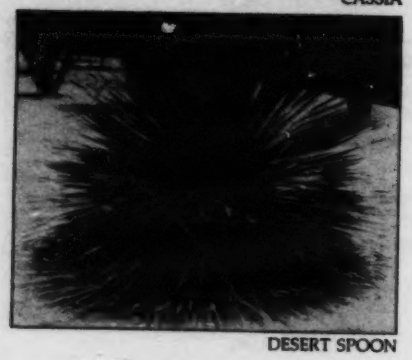
BIRD OF PARADISE, RED

FAIRY DUSTER

Specimen and Accent Plants

Floral Effects—Yellow	
Acacia, Sweet	*Acacia smallii and farnesiana*
Bird of Paradise, Yellow*	*Caesalpinia gilliesii*
Cassia*	*Cassia sp.*
Palo Verde, Blue	*Cercidium floridum*
Brittlebush	*Encilia farinosa*
Palo Verde, Mexican	*Parkinsonia aculeata*
Floral Effects—Red	
Bird of Paradise, Red*	*Caesalpinia pulcherima*
Fairy Duster	*Calliandra eriophylla*
Coral-bean, Western	*Erythrina flabeliformis*
Ocotillo	*Fouquieria splendens*
Chuparosa*	*Justicia spicigera (Anisacanthus thurberi)*
Salvia, Gregg's*	*Salvia gregii*

CASSIA



DESERT SPOON

Floral Effects—Purple	
Willow, Desert	*Chilopsis linearis*
Smoketree	*Dalea spinosa*
Texas Ranger	*Leucophyllum frutescens*
Ironwood	*Olneya tesota*
Penstemon*	*Penstemon sp.*
Mountain Laurel, Texas*	*Sophora secundiflora*
Verbena*	*Verbena sp.*
Floral Effects—White	
Featherbush*	*Lysiloma thornberi*
Daisy, Blackfoot*	*Melampodium leucanthum*
Foliage Texture or Color	
Cassia*	*Cassia sp.*
Cypress, Arizona*	*Cupressus arizonica*
Hopbush, Purple*	*Dodonaea viscosa 'Purpurea'*
Texas Ranger	*Leucophyllum frutescens*
Featherbush*	*Lysiloma thornberi*
Sugarbush*	*Rhus ovata*
Jojoba	*Simmondsia chinensis*
Rosewood, Arizona*	*Vauquelinia californica*

Growth Habit, Distinctive Branching Characteristics

Manzanita, Point-Leaf*	*Arctostaphylos pungens*
Willow, Desert	*Chilopsis linearis*
Desert Spoon	*Dasylirion wheeleri*
Ocotillo	*Fouquieria splendens*
Hesperaloe	*Hesperaloe parviflora*
Fountain Grass	*Pennisetum setaceum*
Jojoba	*Simmondsia chinensis*
Yucca	*Yucca sp.*
Cactus	*numerous genera and species*

* *require occasional deep irrigation during growing season for best landscape appearance.*

In summary, the process of selecting a landscape plant for a park or recreation area should begin with an understanding of its function as required by the design concept. The plant must not only perform that function but it must do so in the environment of a specific site and with the level of maintenance committed to the project. Following these basic steps will result in an attractive landscape that "works" without undue strain on budget or maintenance resources.

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Managing Urban Forests for Recreation

by John F. Dwyer

Tree-lined corridors provide a forest setting for popular linear activities such as walking and bicycling.

U.S. Forest Service

City dwellers have responded to skyrocketing gasoline prices and high inflation by spending more leisure time close to home. Urban recreation also has grown with the resurgence of interest in enhancing the quality of city life. The result is an expanding effort to provide opportunities for high quality recreation in urban areas, but the resources available for the job have been reduced by the same inflationary forces that make the effort so urgent.

Urban recreation resource managers face the challenge of trying to expand their future services without the corresponding increases in available resources. This challenge calls for more effective urban recreation programs, including the management of urban forest recreation resources.

Urban Forest Resources

As urbanites seek more and more of their forest recreation experiences close to home, urban forests will probably continue to receive rapid increases in recreation use. The urban forest is a highly diverse ecosystem characterized mainly by trees but including other plants, animals, climatic and soil conditions, and man and his works. It provides a broad spectrum of recreation opportunities that range from hiking in the "wild" parts of forest preserves to studying nature in arboreta, conservatories, or zoological gardens.

The diversity and complexity of the urban forest ecosystem and the wide range of recreation opportunities that it can provide add greatly to the intricacy of urban forest recreation resource management. The complex interactions among components of the forest ecosystem are not well understood. City dwellers' recreation preferences change over short periods, necessitating flexible and highly responsive management programs.

The urban forest is an intricate network of corridors linking tracts of various sizes and shapes, along city streets and sidewalks, river banks and transportation corridors, powerlines and pipelines, in forest preserves, cemeteries, golf courses, nature centers, vacant lots and fields, arboreta, conservatories, yards and estates, and municipal watersheds. Each forest ecosystem provides its own distinct set of opportunities for recreation.

Notable Development Projects

Some cities are developing their forests in new ways. Seattle has a park built over a freeway. Calgary, Alberta recently completed a 2.6-acre (1.06 ha) park-under-glass that is linked to other small glass enclosed gardens and malls in the heart of downtown. Saskatoon, Saskatchewan, also has plans for glass enclosed parks and walkways with a strong emphasis on cultural development.

The Chicago metropolitan area includes perhaps the most extensive urban forest under a single management agency: the 65,000 acres (26,455 ha) of forest that comprise the Forest Preserve District of Cook County (Illinois). Covering 10 percent of a county that has 5.5 million residents, the forest preserves are managed for resource preservation, environmental education, and outdoor recreation. They provide the setting for more than 31 million recreation visits per year.

Forest environments throughout the urban system complement each other in a synergistic fashion to furnish opportunities for recreation. Tree-lined corridors linking larger tracts provide a forest setting for increasingly popular "linear activities" such as walking, jogging, bicycling, and hiking. These same corridors facilitate the movement of wildlife throughout the system and aid seed dispersal from trees and related plants. The combination of open spaces and woodsy areas creates "niches" for recreation—places for observing unique plants and wildlife, picnic sites with a mixture of sun and shade, and choice fishing spots along stream banks. The urban forest influences recreation in the neighborhood where most leisure time is spent by adding to the character of the local landscape and microclimate; screening out sights, sounds, smells, and substances; moderating sun and wind; and enhancing wildlife.

Tree Planting and Care

Tree planting will continue to be an important management activity because of the strong need for establishing or restoring urban forest environments, particularly along transportation routes, around dwellings, in urban redevelopment projects, and in parks and other open spaces. These efforts will place strong demands on nurseries to introduce new and genetically improved species that are well adapted to the urban environment. Use of such plant materials will lower replacement costs and outlays for maintenance.

The Forest Preserve District of Cook County reduced tree damage by concentrating picnic facilities in open grassy areas with scattered trees rather than in dense forest.

U.S. Forest Service

Healthy, well cared for trees enhance user benefits and improve the cost effectiveness of urban forest management programs. Tree care should be complete. It should involve trimming, watering, and fertilization, as well as protection from insects, disease, pollution, mechanical damage, and vandalism. The "plant it and forget it" approach to urban trees is too expensive for most managers. They should be committed to a management system when selecting individual trees for planting sites. Avoiding or delaying tree maintenance incurs risks of high maintenance, replacement, and liability costs in the future.

Siting and Spacing

Planning the context in which trees are planted requires increasingly critical attention. Managers should strongly resist attempts to cover all urban green space with a tree canopy. In many places users do not want an unbroken tree canopy; they prefer clusters or corridors of trees intermingled with grass and other groundcover, roads and parking lots, buildings, recreation facilities, and other developments. Heavy demands for athletic fields, urban gardens, prairies, and other treeless green space should be considered in urban tree planting. Improperly positioned trees may disrupt these important uses.

The proximity of trees to other resources is a key determinant of subsequent tree loss and damage, as well as of maintenance costs. In many cases, managers can save money with no loss of benefits by maintaining appropriate spacings between trees and facilities. The Forest Preserve District of Cook County concentrates picnic facilities in relatively open grassy areas with scattered trees rather than in densely forested areas. The result is less tree damage and a better place for picnicking and many other uses. Damage to trees and related resources is also reduced by the placement of roads and parking lots and the creation of traffic barriers.

Tree planting has important implications for other components of the urban forest and the associated benefits to city people. Managers are beginning to look at the forest not as a collection of trees but as an ecosystem characterized by trees and including plants, animals, climate and soil, and man and his works. To do otherwise is to risk the creation of such undesirable conditions as damage to nearby homes and gardens from wildlife brought by an extensive tree planting effort, or loss of understory vegetation when many trees are planted close together in a particular area.

Managing the Urban Forest

Urban forest management is getting more attention for many reasons besides the rapid increases in recreation use. Diseases have killed many urban trees, requiring massive tree removal and planting programs and new pest management strategies. Large-scale suburbanization has extended residential developments into farmland and other open-space areas that have been cleared of forest, thus creating the need for establishing and managing the urban forest in new neighborhoods. Urban redevelopment has created similar needs in the inner city. The environmental movement of the 1970s focused more attention than ever before on improving the quality of the urban environment.

The management of urban forests is complicated by the high stress levels imposed on the vegetation by 1) the character of the urban environment and 2) high levels of use. Urban soils often have been disturbed, compacted, or filled, hindering root development. Root problems are particularly critical for the urban forest located in flood plains and subject to periodic flooding and drought. Salt spray, toxic runoff from streets, air pollution, and mechanical damage often pose problems for urban forests. Heavy use by city people has compacted soil; damaged trees, other plants, and facilities; and disrupted wildlife populations.

Pest Management

Because urban trees and associated plants under stress are highly susceptible to insects and diseases, pest management probably will grow more important and complex. Close public scrutiny of urban vegetation usually leads to early detection of pest damage. City dwellers generally have a low tolerance for such damage and often engage in or call for highly intensive pest management and heavy use of pesticides. The impact of pesticides on urbanites and their environment is leading to some significant rethinking of urban pest management strategies.

The squirrels, deer, birds, and other wildlife of the urban forest add to the recreation experience, but they also may become troublesome pests by damaging gardens, homes,

Enlist the support of citizen action groups in implementing urban forestry programs.
U.S. Forest Service

and recreation facilities. The control of animal damage often is complicated by strong public sentiment against actions that may harm animals. The development of management strategies that maximize the benefits of wildlife but minimize the damage is a major challenge.

Development Challenges

Creating urban forest environments through tree planting and subsequent care is one aspect of management; other efforts involve changing the existing urban forest to accommodate new uses. Prominent changes include the development of homes, transportation routes, and recreation facilities. Urban forests are highly prized sites for homes because much recreation takes place near the home. Managers face a major challenge in maintaining a pleasing forest environment while providing for the construction of homes and associated utility and transportation developments. In most instances, managers try to minimize damage to tree roots and stems during construction and subsequent maintenance, soil compaction and disturbance, disruption of soil drainage patterns, and exposure of the remaining trees and related vegetation to sunscald and wind damage.

Vandalism and other depreciative behavior may create problems for plants, animals, and facilities, as well as for users. At the same time, trees and related vegetation may influence the extent or location of some forms of depreciative behavior. Some urbanites perceive areas with a heavy cover of trees or shrubs as high-crime areas. Dense vegetation also may restrict law enforcement patrols. Efforts to reduce antisocial behavior and its associated fears often involve many strategies, including management of vegetation and other components of the urban forest in conjunction with new rules and regulations, enforcement efforts, and educational programs.

Management Restrictions and Options

Urban forest resources are managed by many public and private organizations with various purposes, interests, and levels of expertise. Individuals responsible for these resources may have experience in diverse fields including forestry, arboriculture, landscape architecture, urban planning, parks and recreation, wildlife management, engineering, and environmental education. The diversity of objectives, managers, and managerial backgrounds complicates urban forest resource management.

Urban forest managers often have fewer and somewhat different management options than their rural counterparts. Limited use through permits, blocked roads, or other direct restrictions on access usually doesn't work with large concentrations of city people nearby. Less directly controls such as facility design, placement of vegetation and barriers for channeling traffic, design of roads and parking facilities, rules and regulations, and use of patrol personnel tend to be more effective.

Objections of urbanites often make the use of fire and the cutting of live trees unacceptable as management techniques. The harvesting of dead trees for firewood is limited by concern about the spread of insects and disease and the city residents' overwhelming demand for "do-it-yourself firewood." Most urban forest management programs lack the manpower to supervise firewood cutting.

Most activities are confined to the daylight hours to protect users and to reduce conflicts with nearby residents. Uses such as hunting, driving of off-road vehicles, and camping are often restricted or prohibited because of their incompatibility with other users or nearby urbanites.

Public Involvement

The usually high level of public interest and involvement in urban forest resource management is increasing. Neighborhood associations and conservation groups are playing a more important role in urban tree planting and care, as well as in the control of vandalism and other depreciative behavior. Examples include the Greening of Boston, the California Conservation Project (The Tree People), the Magnolia Shade Tree Commission of New Jersey, Philadelphia Green, the Magnolia Tree Earth Center in Oakland, the Street Tree Consortium in New York, the Adopt-A-Block Program in Oakland, the Adopt-A-Park Program in Detroit, the Green Guerillas, and the Oakland Tree Task Force. In many urban areas, homeowners are being given greater responsibility for selecting, planting and watering "street" trees in front of their homes as well as for sharing in the cost of the trees. Expanding citizen involvement may result in substantial cost savings.

Increasing development challenges managers to adapt urban forest land to new uses.

HCRS

The maintenance of urban forest resources, including patrol and protection, requires large amounts of increasingly costly fuel and labor. Intensive efforts are underway to reduce these costs that are becoming a major drain on urban forest management budgets. The long-term solution appears to be:

1) Redesign of tree planting and other management practices to reduce subsequent maintenance costs.
2) Increased use of volunteer assistance from urbanites.

Coordination and Integration

Substantial cost savings can be achieved by applying modern management techniques to the urban forest. One change may involve combining urban forestry efforts now fragmented under street tree, park, public housing, utility, transportation, water resource, and other programs. Such an effort would facilitate coordination among urban forestry programs, improve their effectiveness, and save money.

At the same time, urban forestry should be more closely integrated into city and regional planning for housing, utilities, recreation, land use, water resources, and transportation. Without such integration, urban developments may continue to eat away at urban forest resources, reducing user benefits and requiring large expenditures for restoration. The effectiveness of integrated planning will depend, in part, on the ability of urban forest managers to anticipate changes in the system— especially in transportation, housing, and utilities—and to develop innovative ways of responding to them.

The urban forest probably will continue to change with urban development in the years ahead. Growing concern about the effects of noise and congestion on urbanites is likely to heighten attention to the forest's role in moderating noise and in screening particular areas, including portions of recreation sites. The character of residential and "street" trees and related open spaces is likely to change as multifamily housing and new developments in mass transit become more popular.

Urban forest resource managers are receiving some help from federal and state sources. The Urban Park and Recreation Recovery Program, administered by the U.S. Department of the Interior's Heritage Conservation and Recreation Service, provides grants to upgrade urban park and recreation resources. A cooperative program of the U.S. Department of Agriculture's Forest Service and state foresters provides technical assistance in urban forestry. The Forest Service is expanding its nationwide urban forestry research program to develop new urban forest management programs and procedures.

Conclusion

Managers of urban forest resources face significant challenges in meeting the rapidly increasing demands for recreation during austere times. This calls for improved management practices and programs based on a sound understanding of 1) preferences for urban forest recreation environments, and 2) techniques for providing those environments.

Some promising ways to increase the effectiveness of these management programs include:

1) View the urban forest as an ecosystem characterized primarily by trees but including many interrelated components.
2) Recognize that the urban forest recreation resource consists of a system of interrelated, and often interconnected, corridors and tracts throughout the urban systems.
3) Give careful attention to the planting of appropriate trees.
4) Deal with the high stress levels imposed on urban forest vegetation.
5) Follow management practices that avoid pest problems involving insects, disease, or animals.
6) Undertake special efforts to make certain that homes, roads, and recreation developments are constructed to maintain or enhance the existing urban forest environment.
7) Coordinate the management and use of forest recreation resources throughout the urban system.
8) Control urban forest recreation resource use through facility design, placement of vegetation and other barriers for channeling traffic, design of roads and parking facilities, rules and regulations, and enforcement personnel.
9) Manage urban forest vegetation to minimize losses to vandalism, crime, and other antisocial behavior.
10) Make effective use of citizen action groups in generating support for and carrying out urban forestry programs.
11) Make use of modern management planning techniques.
12) Coordinate and integrate urban forestry with other urban programs and developments.

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Breeding Better Trees for People

by Frank S. Santamour, Jr., Ph.D.

The United States National Arboretum has become a leader among research institutions in developing superior trees for use in populated areas—a challenge unmatched by any other type of plant breeding.

Urban trees have a high unit cost and value, both at the time of planting and, increasingly, year after year. Thus, 100 percent survival is expected from these trees under prevailing adverse conditions. Selected trees frequently are planted in environments alien to tree growth where cultural care after planting may be minimal.

Nor is the development of improved cultivated varieties—or cultivars—the only challenge facing the arboretum in bringing better trees to people. Commercial nurseries are the main distributors of trees to the public. To disseminate the fruits of our research, we must convince the nursery profession of the superiority of our newly bred cultivars.

Current research at the National Arboretum, which is administered by the Secretary of Agriculture, emphasizes the development of pest-resistant and stress-tolerant cultivars that will thrive in metropolitan or populated areas. To assure the superiority of the cultivars we develop, our evaluation program is thorough, intensive, and demanding.

Magnolia 'Nimbus' has a "tropical" appearance and nicely scented flowers.

National Arboretum

The National Arboretum's Program of Tree Introduction

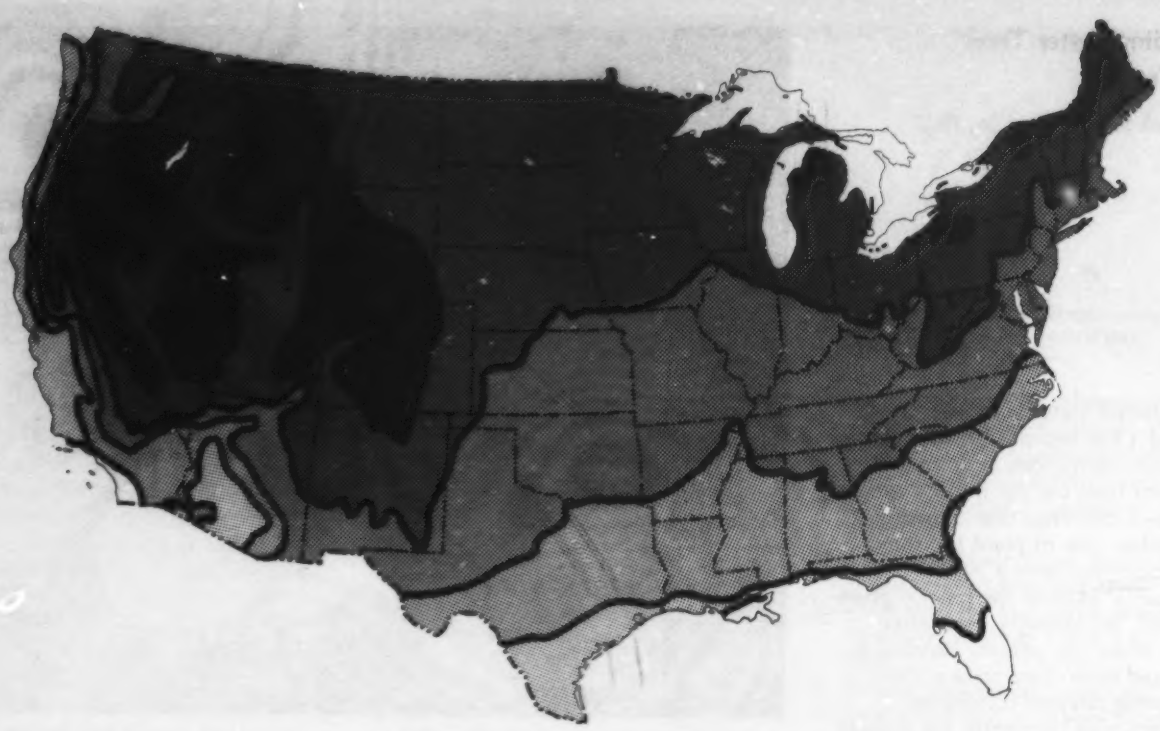
First, plant populations are produced by controlled hybridization or by progeny testing of selected provenances, species, or individual mother-trees. Mass screening against disease and insect pests or environmental stresses such as salt and air pollution, is carried out at as early an age as possible. Populations, or early selections from such populations, then are planted out for long-term testing. After growth potential, flower and fruit characteristics, and resistance or tolerance to various stresses have been determined, selections are made.

These selections are propagated vegetatively, usually by rooted cuttings, and distributed to a nationwide group of cooperating evaluators including nursery professionals, scientists, and laypersons with special knowledge and interest in a particular plant. Evaluations are requested at appropriate times from these cooperators and when such evaluations are favorable and are sufficient to judge the cold-hardiness and cultural adaptability of the plant, we move on to the next phase.

This is the stock increase phase. Our major cooperators in this endeavor are wholesale propagating nurseries, which have a strong desire to help in the production and distribution of superior plants. Only after sufficient stock is available in these nurseries to insure that sales and distribution of the plant will have a significant impact on the "green industry," do we name and release the cultivar for sales and distribution to the public.

This evaluation process is time-consuming. Just waiting for a new magnolia hybrid to flower may take up to 10 years. However, we believe that our program, while frustrating to the individual scientist, is designed to get the best possible plants to the greatest number of people in the shortest possible time.

What are some of the qualities we consider in breeding and selecting new cultivars?



Provenance

Climatic adaptability is obviously an important characteristic, and winter- or cold-hardiness is the most frequently cited criterion. Data given in most tree lists on the northernmost "Hardiness Zone" are based on *species* performance. A nursery professional growing red maple seedlings of local origin in Tennessee may advertise the product as being hardy to Zone 3 (say, St. Paul, Minnesota). While it is true that *Acer rubrum* has a native range encompassing Zone 3, and even parts of Zone 2, there is no guarantee, and little likelihood, that the Tennessee maples will be completely adapted to the colder climates.

One of the most neglected aspects of tree adaptability in the nursery trade is the matter of provenance, or geographic origin of the genetic material. Our native tree species frequently occupy a wide latitudinal and elevational range. Particular populations grow where they do because they are acclimated to the natural environment. Movement of this germ plasm too far north, or south, may result in less than optimum growth and survival.

For non-native species, there is frequently much less information available. We may know the native *range* of the species but not the precise locality of origin of our seed or of a tree in an arboretum. Judgments as to potential hardiness are sometimes based on the coldest zone in which a tree of a particular species exists. Many mistakes have been made by using this criterion of hardiness.

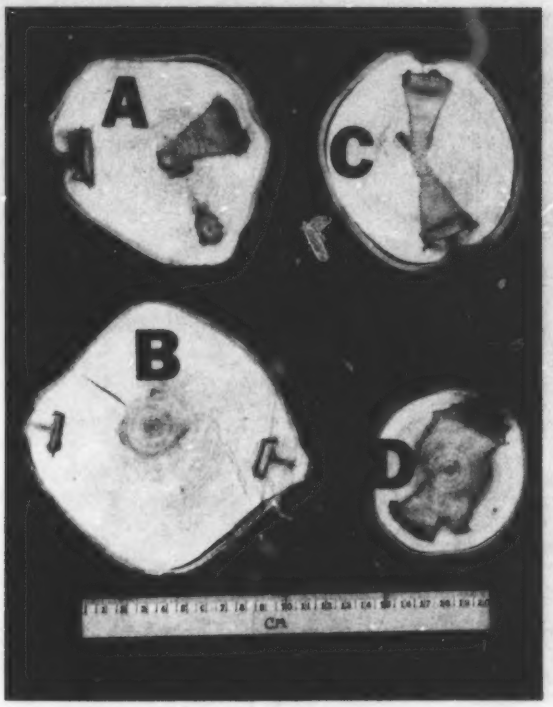
Without belaboring the point further, let me say that the provenance of a tree may well determine its utility.

Before leaving this topic, I should point out that provenance is important not only to hardiness. The movement of plant materials far south of their native or adapted range may cause less dramatic problems, but they are real ones. The long hot summers and drought are only two of the many environmental survival factors that must be considered. In addition, flowering, fruiting, and autumnal leaf coloration may be altered significantly.

Pest Resistance

Neophyte researchers who consult various references listing diseases and insect pests of shade trees, might consider it just short of miraculous that any elms or poplars have survived the biological blitz. On the other hand, they will note that relatively few pests appear to plague certain tree species that are relatively rare in cultivation. It is axiomatic that the number of pests associated with a crop increases with more extensive culture—and intensive observation. There are major pests, minor pests, and unknown pests. What pests are important and how much resistance do we need?

In some genera, the ranking of priorities may be relatively easy. For elms, resistance to Dutch elm disease, phloem necrosis, and Verticillium wilt are in a reasonable order. Among elm insects, the elm leaf beetle would probably be considered the most destructive. Surely, if cultivars were developed with resistance to all the above pests, and possessed reasonable growth habits, they could find ready acceptance in the nursery trade. Yet, nectria canker might still be a problem, as might leaf spots, wetwood, borers, cankerworms, and aphids. Where do we stop?



Cultivars vary in their ability to compartmentalize, or wall off, wounds. National Arboretum

The elms are a special case. Standard references will show a large number of genera and species with only a few serious pests, or none at all. Wouldn't it make good sense to work with these genera and species?

Maximum improvement of our metropolitan environments will come when we seek to improve *all* genera and species that are available to us. The need for diversity is urgent and important.

Pests that are *limiting* factors in the successful culture of a tree are the obvious first choices for resistance breeding and selection. Inoculation with the most virulent or aggressive strains of the pathogen or long-term exposure to natural or enhanced insect populations will be necessary to achieve significant improvement. All tree geneticists, pathologists, and entomologists realize the problems; but each may have strong personal opinions on the relative importance of certain pests and the degree of resistance required. There are no *absolute* answers to these questions.

Stress Tolerance

There is no doubt that certain humanmade stresses imposed on trees in metropolitan environments are major factors in tree growth and survival. Any reduction below optimum growing conditions may make the tree more susceptible to insect, disease, and nematode pests that might otherwise not be problems.

We are fortunate that we can duplicate—under laboratory or controlled field conditions—most of these stress situations. Tolerance of salty and compacted soil is amenable to field and greenhouse experimentation. The effects of gaseous air pollutants may be tested in special chambers. The response of trees to certain sources of artificial illumination can be determined. Furthermore, the response of trees to injuries caused by automobiles and other mechanical agents can be assessed by observing healing patterns of pruning cuts or deliberate trunk wounds during the testing period.

Screening procedures against stress factors may be applied to populations or individual selections and at different stages in the improvement program. For instance, tests of salt tolerance were conducted on seedlings of sycamore progenies resulting from crossing *Platanus occidentalis* and *P. orientalis* at the National Arboretum. Individuals exhibiting resistance to sycamore anthracnose disease in field tests were selected from those progenies that had demonstrated the highest salt tolerance. After further observations on anthracnose, selected clones may then be subjected to salt testing once more before final selections are made. Or the clones may be screened for ozone or sulfur dioxide tolerance.

Stress conditions are seldom the limiting factors to the successful culture of a tree. The limiting factor in *Platanus* is anthracnose. The only reason salt-tolerance testing preceded other tests was that we had an abundance of seed, more than we could possibly use in producing trees for long-term field tests.

Where the number of seed or seedlings is small, stress-tolerance testing should be postponed until after resistance to major pests has been determined. If there are no major pests, the entire improvement program may consist of stress testing.

While we can work with stress factors singly, the trees on the streets are subjected to these conditions in combination with each other, and with biological and climatic factors. We cannot hope to duplicate or even account for all of the variable conditions. Thus, the best products of our laboratory and field studies must be tested on the street. The more ruthless we are in our screening and selection procedures, the better the chances are for the survival and use of our improved trees.

Commercial Propagation

There are few, if any, trees that cannot be propagated and planted successfully if enough time, money, and effort are expended. However, if the nursery professional and the scientist are to get the greatest number of the best possible trees to the largest number of people in the shortest possible time, serious attention must be given to the biology and economics of mass production.

The cheapest and most efficient method of tree production is by seed. If an improved seed-propagated cultivar can be increased by seed, giving reliable and uniform germination, there would be little doubt about its wide acceptance and use. We should remember, however, that such a cultivar also should be uniform in desirable traits relating to survival and growth. Tree species that are heavy and consistent seed producers will be best adapted to this method of propagation.

The next most effective and least costly method of propagation is the rooting of cuttings. The development of rooting hormones and mist systems now allows cutting propagation of many species and genera that were difficult or impossible to root in the past. Still, there are many species in which rooting success is economically marginal, and much remains to be learned.

The geneticist must be the experimental propagator of such material. Juvenility may be the key to success in many species, and initial propagations may be made from sprouts after the propagations have been cut back. Perhaps there are not many nurseries that maintain stock blocks that are handled on a cut-and-sprout basis; but if the scientist can demonstrate that *some* method of rooting is successful, the chances of the material being mass-produced are increased.

Personality

Most popular trees are chosen for their personality, specifically for the traits that differentiate them from the norm. Weeping, fastigiate, columnar, globe, and vase-shaped forms not only are pleasing to the eye, they have distinct utilitarian functions. Autumnal leaf coloration is urban man's reminder that winter is on the way. Permanent leaf coloration may jar the sensibilities of certain beholders, but such non-green-leaved trees do have their place. Flowers are desirable, to be sure, in as wide a range of sizes and colors as nature and the breeder can conspire to develop. Fruit and seed are important too, but often more for their absence than their presence.

Present Research Directions

In these times of energy crisis and inflation, the ability of the National Arboretum staff to function effectively is tested to the utmost. But even under our present limitations of funds and personnel, the highest research standards have been maintained and new developments continue. Among our current projects are:

- *Graft incompatibility.*

Aided by funds from the Horticultural Research Institute, research on graft incompatibility has begun. Delayed problems created by scion/stock incompatibility in landscape and street plantings of improved cultivars are costly—and they are increasing as the demand for more and better cultivars grows. Rootstock selection has become a key consideration. Most of this research effort has been concentrated on maples, oaks, and elms, but preliminary work on other genera also shows promise. Related to the problem of grafting is the study of initiation and cessation of cambial activity as measured through electrical resistance; early data indicate that electrical resistance, like growth activity, is a heritable characteristic.

'September Gem' is a new evergreen holly of limited growth with large red, early-ripening berries.

National Arboretum ▶

Not all hollies are evergreen, and the new cultivar 'Sparkleberry' is very cold hardy and holds its bright red fruit through the winter.

◀ National Arboretum

• *Wound Response.*

We have shown that the compartmentalization response of trees—or the walling off and containing of a stem or trunk wound—is inherited. Now we are trying to identify the chemical responsible for this walling off.

One problem of a breeding program involving compartmentalization is the size, type, timing, and number of wounds necessary to determine whether a tree is a weak or strong compartmentalizer. In many situations, only a single tree will be available for this determination, not several members of a clone or cultivar. An accurate assessment of the compartmentalization potential of parent trees is absolutely necessary before valid judgments on inheritance can be made.

Recently, we attempted to perform similar experiments on the response of trees to root wounding. We found that the situation in roots is either more complex or simply requires more time for expression. Therefore, we have initiated another root wounding study—the results to be available in 1982.

• *Root Hardiness.*

The increased landscape use of trees and shrubs in large, aboveground, outdoor planters has focused increased attention on cold-hardiness of the root system as a limiting factor in these situations. We have shown that root hardiness of green ash, like stem or bud hardiness, depends to a large extent on the native geographic origin of the plant material. If enough large-capacity planters can be obtained by donation or purchase, we plan to extend these studies into a comprehensive investigation of the selection and culture of trees in tubs.

• *Hollies and Elms.*

The holly breeding project at the National Arboretum, which began in 1956, may be the most extensive in the world. Testing continues on the nature and incidence of and resistance to holly leaf miner, with additional hybrid combinations being used. Likewise, a number of Chinese hybrid elm varieties continue to be tested for resistance to Dutch elm disease.

• *Anthracnose-Resistant Sycamores.*

The major problem in the cultivation of sycamore or planetrees is sycamore anthracnose disease. In the past we have recreated the highly resistant "London" plane hybrid and are currently evaluating four clones of this variety. Since this will take a long time, we decided to produce, *en masse*, a seed-propagated progeny with high anthracnose resistance and fairly uniform growth characteristics. Therefore, in 1979, we repeated a cross whose progeny has shown good growth and that had no trees with more than 5 percent wilt during our severe anthracnose years. We have harvested more than 150,000 seeds from this cross and will make the seeds available to nursery professionals.

Frank S. Santamour, Jr., Ph.D., a Research Geneticist, is Director of the U.S. National Arboretum. For further information about the Arboretum's research projects involving trees, shrubs, herbaceous plants, and taxonomy, contact Dr. Santamour at the U.S. National Arboretum, Washington, DC 20002.

Plan Before You Plant

by Monty L. Christiansen

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1. Unnecessary grass strips require mowing.
2. "Mower's blight" afflicts many young trees.
3. Park users seek the most direct route.
4. Drinking fountain areas should be surfaced.
5. Trimming grass under benches can be expensive and time-consuming.

Monty Christiansen

The ultimate objective in park planning is creating a recreational experience for park visitors. An extremely important element of this experience is its setting. Park management consists of protecting and preserving the park setting, with vegetation management constituting a major component of this process.

Vegetation management describes the pre-planning and process of planting, cultivating, fostering, preserving, and maintaining desirable vegetation in a park. With the special exceptions of the national wilderness areas and a few others, the bulk of our parklands are not self-maintaining; they are resources in need of management. For most park agencies, the concern is not whether to manage a new parksite, including its vegetation, but is how to manage it most effectively. This management must be initiated in the pre-design phase of park planning, long before actual development of the park facilities.

There are several fundamental procedures within effective low-cost vegetation management that should be incorporated into the park planning process.

Establish a park vegetation management policy before design and incorporate specific objectives into the designing criteria.

One policy consideration for managing park vegetation is cost effectiveness—which is not to be misinterpreted as trying to do the job cheaply.

One approach to cost-effective management in the park is through zoning particular areas according to both the vegetation and activities occurring there. The development norm and degree of use for each area can be classified in chronological order designating the extent, frequency, and type of husbandry to be provided.

A simple example of such a management zoning plan is a golf course, with its greens, trees, and roughs all needing distinctive and different vegetation management. Municipal parks may have one set of criteria to manage exhibition gardens, arboreta, and floral displays; another for intensely used activity areas such as sportsfields, picnic groves, grass beaches, and playgrounds; another for nonintensive or off-season activity areas such as general purpose playfields and winter sports slopes; possibly a separate set of criteria for park landscape forms and support facilities such as earthen dams, embankments, swales, and dikes; and still another for special wildlife preserves.

Cost effectiveness also relates to the sophistication of planning energy control. The careful use of deciduous and evergreen trees, mass plantings, and groundcovers can save energy by reducing maintenance. For example, evergreens if planted in a linear pattern can actually serve as a living snowfence, and keep large deposits of snow off park roads and parking lots. Living windscreens can reduce leaf cleanup from tennis, handball, or basketball courts. Such examples of energy planning save both fuels and manpower.

Plants can provide natural air conditioning by reducing or permitting solar exposure for heat and light control. They can reduce humidity, direct the air movement in the summer, provide windbreaks, and reduce heat loss in the winter by natural insulation. These management objectives are obviously cost effective for areas where vegetation exists adjacent to park structures such as community buildings, shelters, comfort stations, lodges, cabins, information centers, nature centers, and others.

A fine case study of establishing a district-wide vegetation management policy, written by John Nicoles, appears in this issue of *Trends*.

Identify and change improper plant material specifications in preliminary plan reviews.

First, note the existing vegetation, proposed vegetation, and the functions of these as related to the area. Plant materials have attributes just like people and, like people, should be employed to utilize their best features.

Coaches prefer tall shooters for basketball, strong tacklers for football, fast runners for track. Park planners should select vegetation with the same care. If this is not done, corrective and often costly alternatives must be substituted. This can be compared to putting a short basketball player on stilts, or providing a weak football player with a club, or a slow runner with a motorcycle. It's better to meet your needs through effective recruiting and trading.

Significant characteristics of plant materials that should be considered

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in the planning process include plant scale, form, habit, foliage color and density, canopy, flowers and fruit, root structure, vigor, and tolerance. The following examples illustrate the effect plant characteristics have on vegetation management.

Many park agencies invest extra labor, equipment, and fuel to trim and prune trees, hedges, and shrubs because their plants are either too tall, too wide, or not shaped as desired. (Examples include forsythia, hemlock, and bridalwreath spirea.) Instead, park planners should specify plants with the natural height and shape—compact and full or loose and open—that are needed for a particular site.

Plant habit refers to the structural pattern of a species. Some plants are single trunked, others are multiple stemmed; some have limbs that grow upright and ascend, others descend or weep, and still others branch horizontally. Some plants have a high overhead canopy while others branch low to the ground.

An all-too-common problem has been the use of trees with low branching or descending habits adjacent to park walks, parking lots, and roadways, or in dense activity areas such as picnic groves and playgrounds. Pruning and trimming lower branches from trees such as pin oaks, willows, and spruces to provide clearance and space for people, automobiles, and mowers is acknowledgment of poor plant selection.

Foliage density affects visual screening, sound masking, and degree of shade. It is often desirable to contain the "perceptual park landscape" in a natural, nonarchitectural manner with plants and land forms. Also, research has indicated that park visitors have shade preferences depending upon activity, time of day, and season.

For example, campers generally prefer light shade or full sun in the spring and fall as well as in the summer mornings, but prefer a moderately dense shade during summer afternoons. Picnickers, swimmers, and others have similarly noted shade preferences, which should be considered when planning these activity areas.

Plant fruits can be an attractive asset or they can cause extra maintenance and problems. Those plants that produce large, heavy fruits or nuts (such as walnuts, hickories, osage oranges, or buckeyes) or fleshy, juicy fruits (such as flowering crabapples, cherries, ginkgoes, or mountain ashes) should not be located near parking lots or walkways or in dense activity areas. If they are, these fruits and nuts may fall on automobiles, equipment, and individuals. After falling, they may cause someone to suffer a dangerous slip or fall, or may be tracked into cars and buildings—and increase maintenance.

The roots of some trees (such as locusts, maples, and beeches) are strong and shallow. These have been known to lift and break asphalt or concrete if planted too close to walks, surface courts, parking lots, and roads. Other trees, such as willows and alders, seek moisture and have clogged sewer lines and damaged drainage fields, earthen dams, and levees.

Plant tolerance and vigor are also significant characteristics to consider in managing park vegetation. For example, plants tolerant of droughts require less watering; some plants grow well in acid soils; some in alkaline soils; some plants are tolerant of auto exhaust fumes, salt, wind, or heat. In planning, consideration needs to be given to those special microclimates near masonry buildings, ventilation fans and exhausts, air-conditioning compressors, and other park support appurtances.

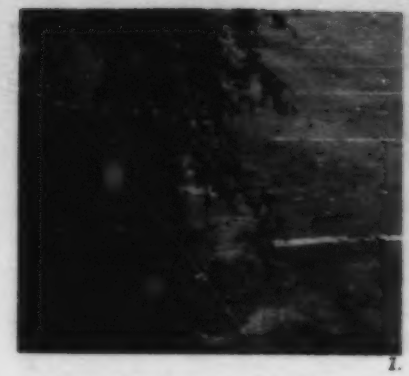
Landscape architects are well trained to select plant materials suitable for these conditions. Dr. Charles Sacamono gives additional information and guidelines in his article on choosing appropriate vegetation in parks.

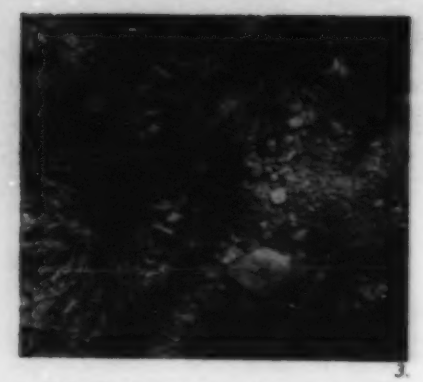
Review plans for possible design related vegetation management problems.

There are four common "problem zones" that may become apparent only after plantings mature: circulation routes, areas around buildings, spaces under and adjacent to park furniture, and landscaping over buried utilities.

Pedestrian and bicycle routes must provide logical and convenient traffic flow for users. A gracefully sweeping curved walk may look pleasing on a two-dimensional plan of the park but could really lead people out of their way. This only encourages shortcuts or new paths—usually through turf areas, groundcovers, shrub beds, or hedges. The repair of these areas and revision of circulation routes after development is costly.

Another frequent vegetation management problem that can be solved in the planning stage is unnecessary plantings which require extra maintenance. Examples include grass strips between a walkway and an adjacent parallel building wall or fence, on traffic islands, intersections, or walkway junctions; group plantings of shrubs at the start or end of a walk in a building, parking lot, or road; and plantings intended to hide or "soften" the appearance of the utility appurtenances such as manholes, transformers, gate and valve boxes, meters, and hydrants.





1. Fallen fruit can be hazardous and messy.
2. Plant steep banks with ground cover.
3. Remove small stones and rocks before placing turf.

Monty Christiansen

These plantings usually are incongruous with their surroundings. Thus they actually draw attention to the equipment and make servicing or access to these items inconvenient.

Turf is an excellent park surfacing and can be very cost effective if used to maximize mechanical maintenance. Mowing considerations include such factors as spacing between obstacles (trees, pools, walls, and so forth) and gradients of turf slopes appropriate for mowing machines. Costly trimming, edging or clipping can be minimized by careful placement of park furniture such as benches, lamp posts, fences, gates, drinking fountains, and grills—and by substituting surfacing, paving, or mulch instead of grass under or around these. Mulch beds around young trees also may prevent an infestation of "common mower blight" caused by power mowers bumping, scraping, or rubbing against young tree trunks.

In many cases, careful grading of a park with proper contouring, diversion swales, runoff retention basins, and groundwater recharge areas along with proper vegetation planning and management for these landforms can replace costly underground storm water drainlines, help prevent erosion, and reduce runoff contamination of park streams and lakes.

The edge of any body of water poses a potential management problem. The abrupt change from the terrestrial plant domain to the aquatic plant domain creates an ecologically delicate and often unstable zone. Because people are naturally attracted to water, this edge may become a heavy impact area as well, requiring special planting and management considerations.

Chlorinated water from swimming pools is another special concern. For example, a buckbrush hedge that screened and separated a toddlers' wading pool from the main swimming pool, died after several seasons because of the treated water from the pool splashing on it.

Identify the specific management requirements for the existing and proposed vegetation in the park and review the plans for necessary support facilities.

Vegetation management entails selecting appropriate materials, labor, equipment, timing, and task frequency in an efficient manner. For example, on one park plan the availability and placement of water outlets were examined with regard to vegetation management. Additional hosebibbs were desired adjacent to vegetation that would receive routine watering or irrigation. For areas infrequently watered, occasional hoselines or portable water tanks were considered more cost-efficient than permanent lines, which had to be installed below a deep frostline and in a very rocky soil. Water hydrants were planned at several points in the park to permit convenient recharging of sprayers and other maintenance equipment and eliminate time lost from returning to the maintenance center to refill empty tanks. The plan examined width of gates and service routes to make sure sprayers, mowers, and other maintenance equipment could have direct access to work areas.

Snow removal procedures were reviewed for parking lots, roads, and snow deposition sites. Projected amounts from plows and snow blowers were examined and their impact upon the effective vegetation studied.

Identify processes or phases of park construction that require careful treatment or supervision to prevent or reduce future maintenance problems.

Of particular concern is the preparation of the soil, be it a seedbed for a turf sportsfield, a bed for mass planting, or bedding next to the foundation of buildings or other structures. Careful soil treatment and preparation should be noted in the construction specifications.

A poorly prepared, stone-filled seedbed for a turf field will cause vegetation management problems after development. The rocks and stones will work to the surface and cause havoc with effective management and safe use of the field.

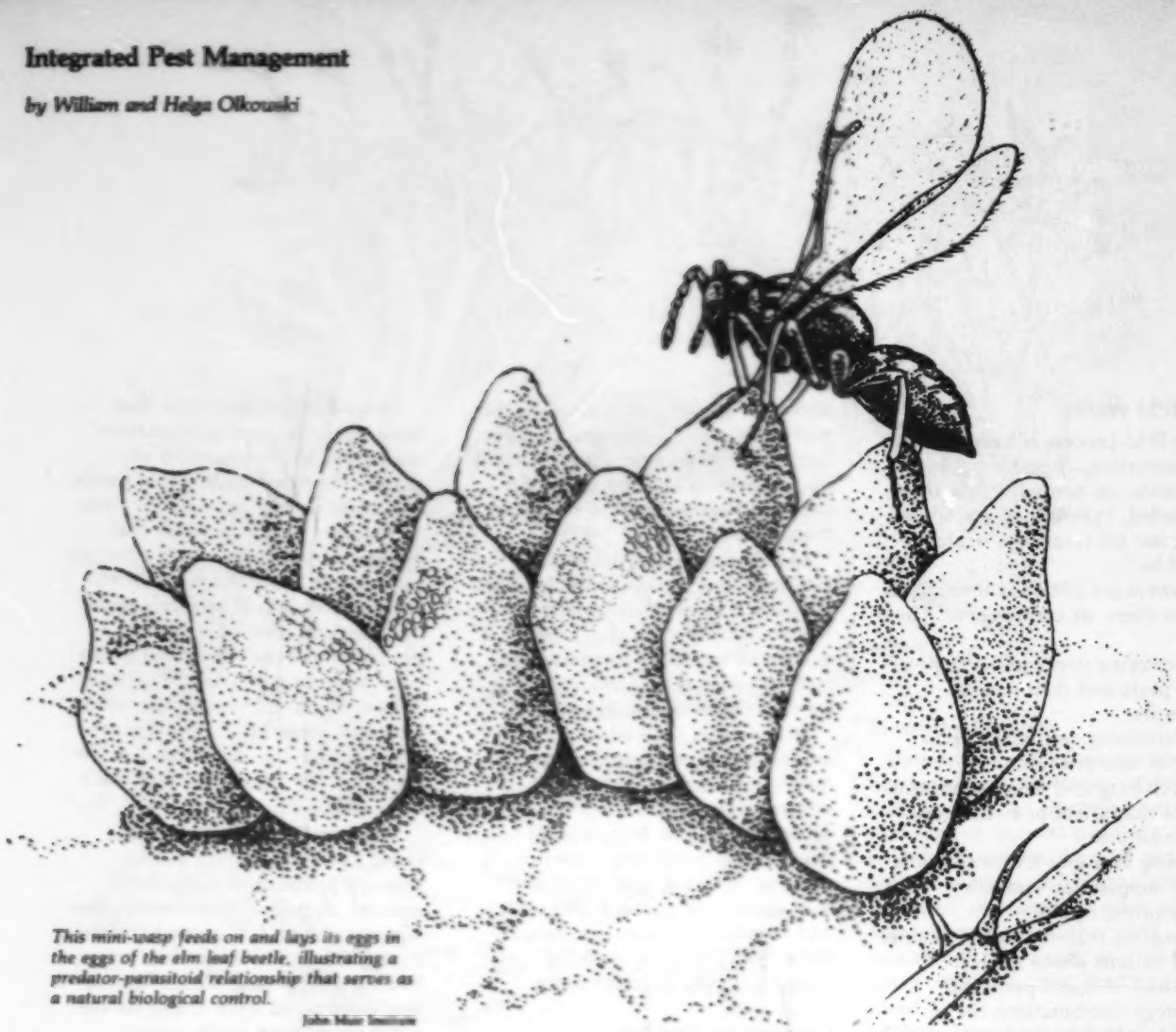
Backfill of raised planting beds and areas around buildings and wall foundations often provides a handy dump for a variety of construction wastes and debris, which may contain toxic chemicals or excesses of acidic (or alkaline) materials. This eventually causes problems for any vegetation planted over it.

By incorporating pre-design procedures similar to those mentioned here into vegetation management in parks, many potential problems can be eliminated and the efforts can become more cost-effective.

Monty L. Christiansen is Associate Professor of Recreation and Parks at The Pennsylvania State University, University Park, Pennsylvania.

Integrated Pest Management

by William and Helga Olkowski



This mini-wasp feeds on and lays its eggs in the eggs of the elm leaf beetle, illustrating a predator-parasitoid relationship that serves as a natural biological control.

John Muir Institute

"When you kill off the natural enemies of the pests, you inherit their work," Carl Huffaker, noted scientist, once said. But killing off pests has been the goal of millions of people for hundreds of years.

Now, one approach has been devised to reduce pest populations without wiping them out and thereby creating further problems like those suggested by Huffaker. The approach, known as integrated pest management (IPM), is a technical decisionmaking process that combines all available pest control techniques into a program for suppressing pest populations below a level at which they pose a threat. The process is based on the understanding that insects and other animal populations are normally under natural control.

While IPM first was developed to control insects harmful to agriculture, its problem solving approach now is being used successfully in a variety of situations involving forest management, urban pest control, water resources management, wildlife management on rangelands and rights-of-way, and parklands management.

For example, IPM has been successfully adapted in Berkeley, California. The goal of the program, developed in the early 1970s by the local Recreation and Parks Department, was to control insects on the city's 30,000 street trees.

In 3 years the program virtually eliminated synthetic chemical insecticides as regular management tools for the city's 123 species of shade trees. This resulted in lower pest management costs, fewer citizen complaints, elimination of secondary pest outbreaks, and a reduction in environmental contamination. A 1974 estimate showed that the city then was saving about $22,500 each year in labor and pesticide costs by employing the IPM process.

Any integrated pest management program seeks to make maximum use of naturally occurring pest controls, including weather, disease agents, predators and parasites, and availability of food and habitat. In addition to such natural controls, IPM may employ various biological, physical, and chemical controls.

Whatever the resource under management—whether primitive forest, urban recreation area, or wetland—it is viewed as a functioning ecosystem where everything is related. Thus, actions are taken to restore, preserve, or augment the checks and balances of nature.

How IPM Works

The IPM process is based on four basic questions. *If* pest suppression treatments are needed. *When* they are needed. *Where* they are needed. And *what* the treatment strategy should be.

Answers are obtained through six process steps, or components. These are:

1) Monitoring populations of potential pests and their natural enemies.
2) Determining aesthetic or economic injury levels.
3) Developing and integrating strategies that affect potential pest populations.
4) Timing and spot treatment with pest suppression strategies.
5) Evaluating results.
6) Educating maintenance personnel and citizens about natural enemies of insect pests and strategy combinations for environmentally sound pest control.

Monitoring—the Key

The key component of any IPM program is its monitoring system. Regular observation is made of present and potential pest populations and their natural enemies, of human activities that directly or indirectly affect pest or natural enemy populations, and of weather factors such as temperature, humidity, rainfall, and flooding.

A monitoring program can be designed to determine the amount of injury caused by the pest, when the best time for pesticide treatments occurs, whether the release of beneficial insects would help, the relationship of the pest population size to weather, specific information about the biology or ecology of the pest or its natural enemies, or some combination of these. Each monitoring program is tailored to the particular problem situation requiring management.

Monitoring is used to identify the problem, and to determine the most effective way of dealing with it. Regular observation also provides a margin of safety by gathering facts that will spot at an early stage any new problems that might arise.

At the same time when present and potential pest populations are monitored, account is taken of various factors that affect them. These can include horticultural practices such as fertilizing, watering, pruning, mowing, and mulching; management of garbage and waste; and human behaviors that range from storing food to walking household pets in urban parks.

Grasping the Problem

Proper monitoring helps the management team assess the full extent of a problem. One example of this can be seen in a current IPM maintenance project for flood control levees in California.

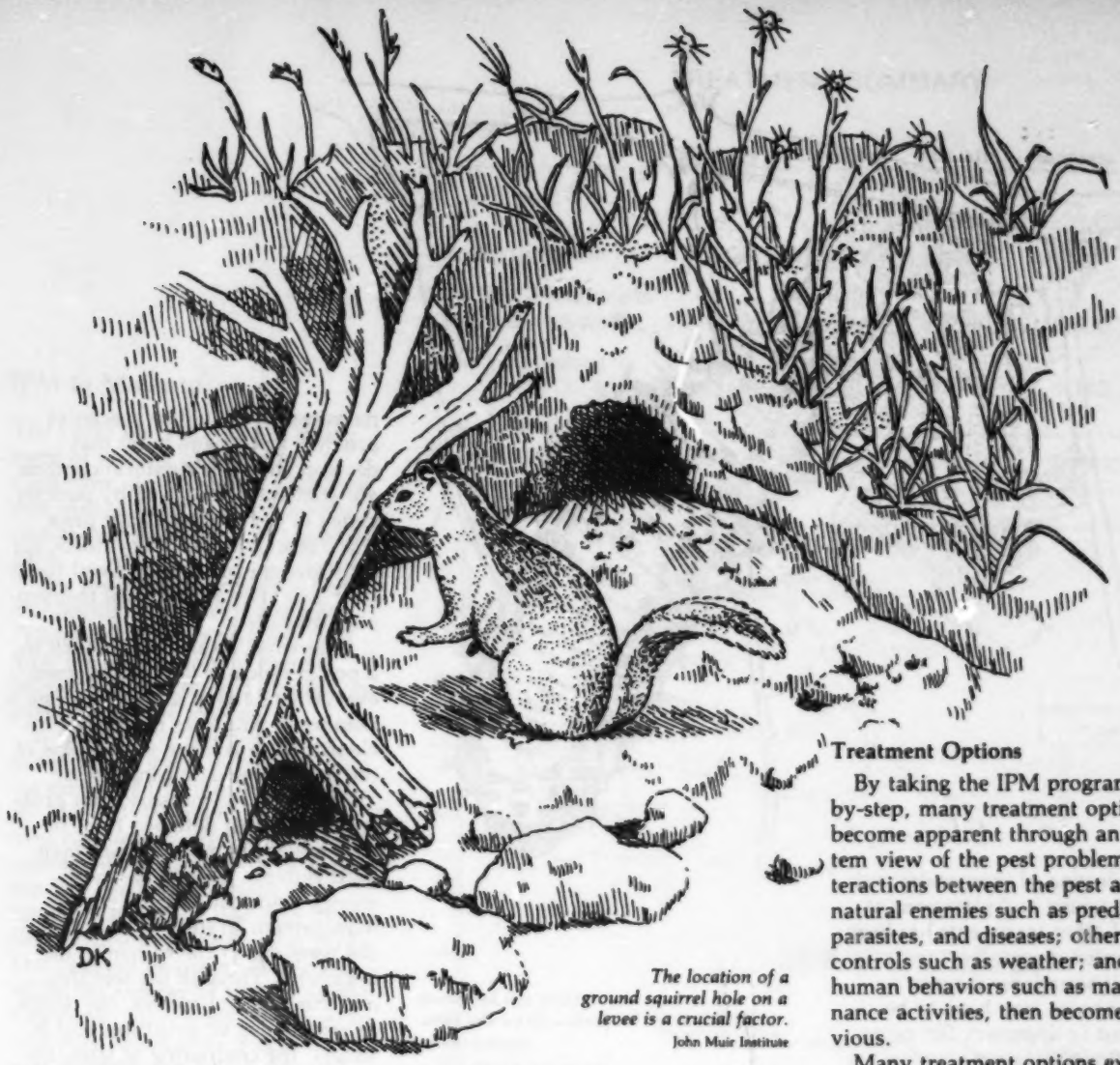
On flood control levees, ground squirrels, gophers, and a variety of agricultural weeds are major pests. Other challenges to the integrity of the levees include cracking and erosion caused by water and human activities such as the use of motorcycles and off-road vehicles.

In the case of the ground squirrel, any one squirrel hole can provide a channel through which flood water could breach the levee. But location of the hole—whether on the land or water side—and the width of the levee at the site of the hole are crucial factors. Top priority is given to areas that have the largest ground squirrel populations on the water side.

Monitoring studies show that wide strips of riparian vegetation are beneficial for a number of reasons, but that undesirable weeds can infest nearby agricultural areas. The studies further indicate that burning of plant cover and other activities that lower plant height encourage the ground squirrels, since the creatures need to see their predators to avoid them and to see each other to maintain their social system. Removal of the vegetation also encourages quicker and more uneven drying of the interior of the levees, which results in more cracking and settling.

Through monitoring, the red-tailed hawk was found to be a primary predator of the ground squirrel. A pair of these hawks may take more than 500 ground squirrels during the period when they are feeding their young. Other known predators noted were marsh hawks, white-tailed kites, owls, gopher snakes, and a wide variety of wild and domestic cats.

Threats to these predators, including secondary poisoning from consuming poisoned prey and vegetation destruction by maintenance workers, were other factors that needed alteration. The prey were being poisoned primarily by adjacent farmers. The vegetation destruction resulted from the annual burning of levees, justified on the grounds that the practice facilitated levee inspections.



The location of a ground squirrel hole on a levee is a crucial factor.
John Muir Institute

The monitoring and other studies showed that all these predators of the ground squirrel could be encouraged through the conservation and augmentation of a diverse riparian vegetation on and adjacent to the levees.

The IPM program for the levees thus indicates the need for more permanent, diverse, and climatically suitable plantings on the levees to create a low-maintenance system that will protect the integrity of the area. Plants on which ground squirrels feed will be avoided on land directly adjacent to the levee. (Adjacent walnut orchards were found to be a major food source for the squirrels.) Finally, an educational program for both landowners and the general public has been implemented to ensure a successful, long-term regional approach to the pest problem.

How Much Is Bad?

Pest management through an IPM program aims at reducing the size of the pest population to a point where no intolerable economic or aesthetic damage occurs. The cost of the treatment always should be less than or equal to the cost of the damage caused by the pest. *The aim is not to eliminate the pest* from the area; that also would eliminate its natural enemies and make the situation even more unstable.

Essential to the program is determining how many potential pests can survive without causing serious damage and without pest population resurgence. This population size is called the injury level. Once this information is obtained, the goal is to maintain the pest population at or below that level.

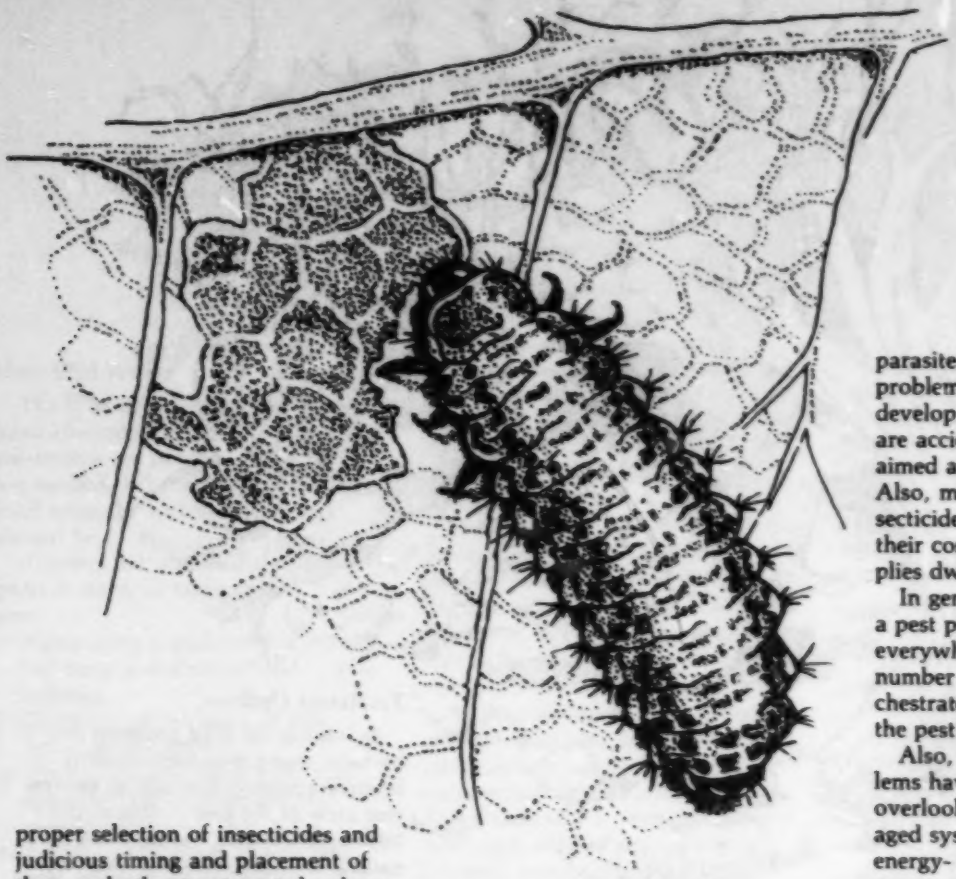
Treatment Options

By taking the IPM program step-by-step, many treatment options become apparent through an ecosystem view of the pest problem. Interactions between the pest and its natural enemies such as predators, parasites, and diseases; other natural controls such as weather; and human behaviors such as maintenance activities, then become obvious.

Many treatment options exist under an integrated pest management system. Habitats can be modified to reduce pest harborage, food, or other requirements. The environment can be enhanced for the pest's predators, parasites, and diseases.

Treatment can be as simple as modifying such human behavior as watering, fertilizing, pruning, mowing, mulching, cultivating, waste management, and food storage. In some cases, education, not suppression, may be needed. Public demand for manicured landscapes or fewer of certain insects can be reduced through educational programs in schools, exhibits on the ecosystem, slide presentations, and the use of the news media.

Biological controls frequently are the most effective and enduring form of treatment under an IPM program. Successful conservation of the pest's natural enemies through



Adult elm leaf beetle feeds only on elm trees.
John Muir Institute

proper selection of insecticides and judicious timing and placement of these and other treatments has been demonstrated repeatedly.

In other situations, the pest's natural enemies may have to be augmented or imported. For example, the Berkeley insect problem referred to earlier, stemmed from the fact that most of the trees were not native to the area. Therefore, they were vulnerable to occasional invasion by tree-feeding insects that belonged to an exotic ecosystem. The city lacked populations of those beneficial insects that serve as natural controls on the exotic pests. After determining what insects were causing the problem, Berkeley researchers identified the native area of the pests and imported their natural enemies. Once this was done, classical biological control proved successful on the three species of aphids which were attacking Berkeley's linden, elm, and English oak trees.

An IPM program does not rule out the use of chemical controls; it merely puts the use in perspective as one of many options. Chemical controls include the use of pheromones and other attractants to lure or confuse the pest; juvenile hormones that arrest pest development; sterilants or "contraceptives" to reduce breeding of future generations; and contact, stomach, and other poisons.

Since the end of World War II and the growth of the agri-chemical industry, modern insecticides have formed the backbone of pest management programs in this country. Unfortunately, a number of problems with these materials have begun to emerge. Their effects on human health and wildlife survival are increasingly well publicized.

Not so obvious, and thus less understood, is the way in which the unwise use of insecticides actually may cause more pest problems than it cures. Insect pest populations can rebound when an insecticide kills off the beneficial insect predators and parasites. Entirely new species of problem insects and mites may develop when their natural controls are accidently destroyed by poisons aimed at the original target pests. Also, most commercial synthetic insecticides are made from fossil fuels; their cost rises as our fossil fuel supplies dwindle.

In general, no single approach to a pest problem is likely to succeed everywhere and at all times. Often a number of strategies need to be orchestrated to achieve suppression of the pest below damaging levels.

Also, in large measure, pest problems have been designed into, or overlooked, in many human managed systems. By far, the most energy- and cost-efficient pest management strategy is to design the pests out of the system in the beginning. Through the selection and mix of plant species, the design or remodeling of structures and interiors, the contouring of sites, the design of organic waste and other resource management processes, the extent that preferred harborage, food, water, and other requirements of the life cycle are provided, these measures all can contain the population of existing or possible pests.

Or, in the words of another scientist, Mike Dover, "Use of a pesticide is no substitute for prevention."

William Olkowski, Ph.D., and Helga Olkowski are co-directors of the Center for the Integration of Applied Sciences, a project of the John Muir Institute for Environmental Studies. For more specific information and a list of publications on integrated pest management, contact the Olkowskis at: CIAS, 1307 Acton Street, Berkeley, California 94706.

IPM in Modesto

The Parks and Recreation Department of the city of Modesto, California, developed an integrated pest management program for the city-owned streetside shade trees in 1976.

The program began with a weekly monitoring where key pests were determined. Studies revealed their local life cycles, natural enemies, habitat preferences, and population peaks during the season.

A quantitative sampling determined injury levels in order to plan the timing of treatments. For example, the 320 city maintained elm trees had been treated twice each season with Metasystox-R to reduce elm leaf beetle populations. Monitoring showed that only 59 elms needed one treatment in 1978. This reduced treatment 91 percent. While the number of trees requiring treatments varies from year to year, continued monitoring is expected to keep pesticide use below pre-IPM levels.

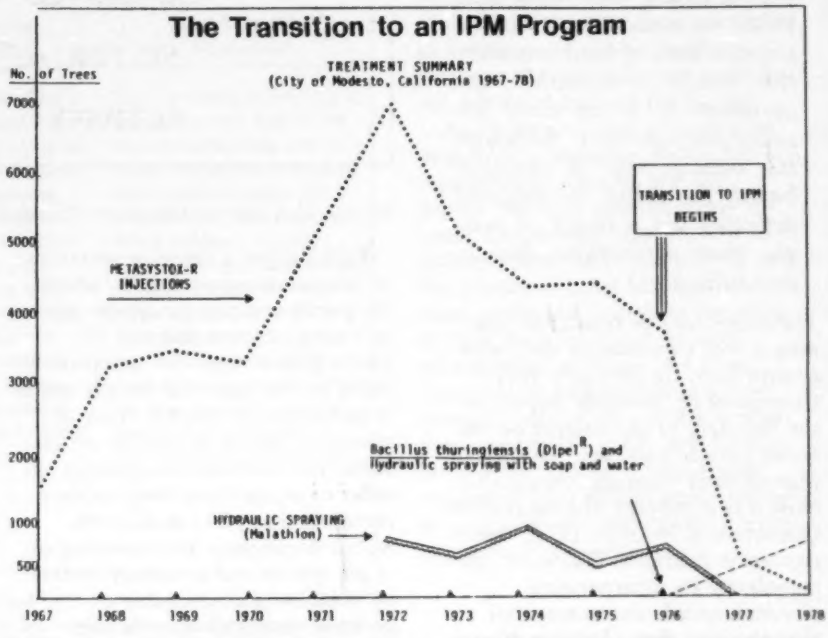
A management strategy for each key pest was developed. Over the 3-year implementation period, pesticide treatments were reduced overall approximately 99 percent, from 4,530 trees in 1976 to 59 in 1978. At the same time, citizen complaints or requests also were gradually reduced. For example, 33 percent fewer insect related service requests were received by the department in 1978 than in 1977. Repeat requests also were reduced.

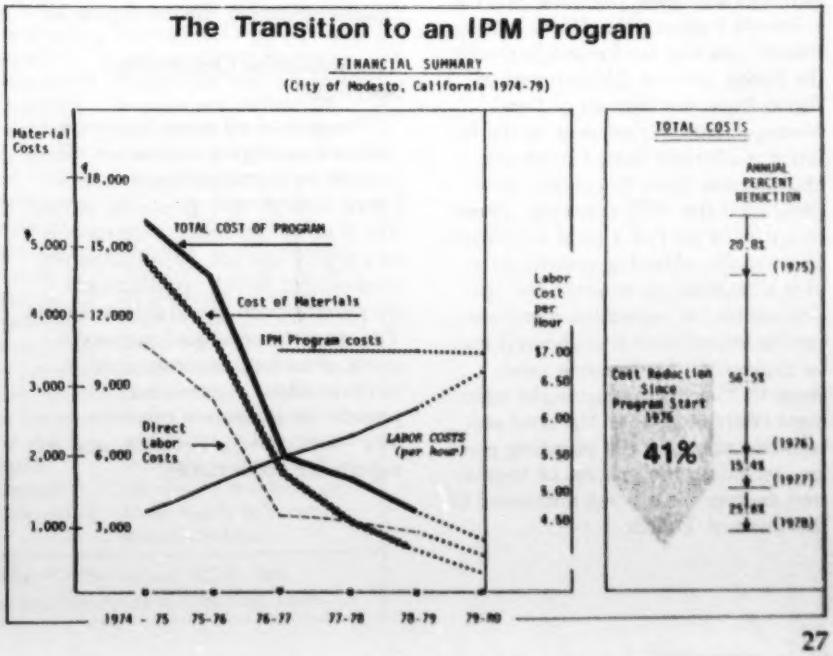
During the 3-year initiation period, although labor costs per hour were rising, total costs of the pest management decreased 41 percent.

The same pattern has been repeated in a number of cities through the use of IPM. The accompanying chart shows results of using IPM in some California cities.

TREATMENT SUMMARY

	Berkeley	San Jose	Palo Alto	Modesto	Davis
Tree population	35,000	250,000	80,000	85,000	12,000
Pre-IPM Treatments (annual average)	11,500	42,000	1,600	8,000	2,000
IPM Treatments 1977	144	3,714	314	1,115	200
Percent Reduction	99%	88%	80%	86%	90%





Recreation Opportunity Spectrum: A New Management Concept

by Thomas A. Hoots and Leon J. Buist

Primitive	Semi-Primitive Non-Motorized	Semi-Primitive Motorized
Roaded Natural	Rural	Urban

Figure 1. The Recreation Opportunity Spectrum Classes.

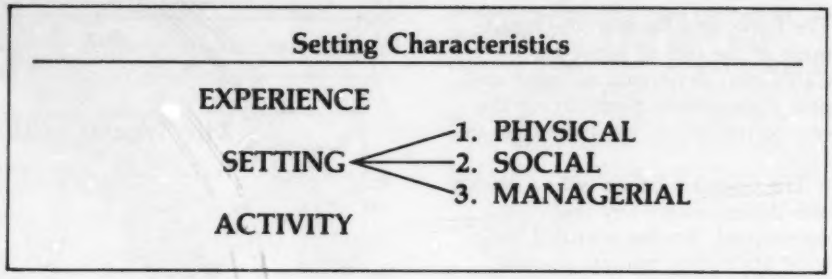


Figure 2. Components of Recreation Opportunity Classes.

"Managing for recreation requires different kinds of data and management concepts than do most other activities. While recreation must have a physical base of land or water, the product—recreation experience—is a personal or social phenomenon. Although the management is resource based, the actual recreational activities are a result of people, their perceptions, wants, and behavior."

The complexity of recreation planning is well expressed in the above excerpt from the February 1979 Committee of Scientists' Report to the Secretary of Agriculture on the Forest Service Land and Resource Management Planning Regulations. Now a new concept, the Recreation Opportunity Spectrum (ROS) helps recreation managers deal with this complexity by incorporating physical, social, and managerial elements into their planning process.

Recent cooperative efforts among researchers and land managers with the Forest Service, Department of Agriculture; the Bureau of Land Management, Department of the Interior; Colorado State University; and Oregon State University have developed the ROS concepts. These concepts, a part of a total recreation opportunity planning system, provide a framework wherein the opportunities for recreation experiences can be inventoried and demand may be expressed. At the same time, these ROS concepts can make significant contributions to the land and resource management planning process, including the process of vegetation management being addressed in this issue of *Trends*.

ROS defines a range or spectrum of recreation opportunities, which the public and private sectors can provide to meet a diversity of visitor preferences. The spectrum is based on the logic that people prefer to participate in specific types of recreation activities, within certain preferred environmental settings, in order to attain those kinds of experiences that yield satisfaction. ROS incorporates this reasoning into an operational inventory system by combining all probable experience outcomes into six identifiable spectrum classes (figure 1).

The Recreation Opportunity Spectrum

The goal of all recreationists is to realize a satisfying experience. This is done by participating in a preferred activity in a preferred setting. The goal of recreation managers is to provide specific, identifiable settings within which recreationists may participate in suitable activities. The recreationists' and managers' goals, therefore, are expressed in terms of three interrelated components of recreation opportunity—an activity, a setting, and an experience opportunity.

Since the goal of recreation managers is to provide settings, they must be able to inventory and manage the setting component. To facilitate this ability to manage settings, three subcomponents are identified—the physical, the social, and the managerial (figure 2).

Composition of Recreation Opportunity Spectrum Class

The physical setting is that condition on the ground which relates to the amount of environmental modification from human activity. It is influenced largely by the degree of remoteness, the evidence of humans, and the size of the basically undisturbed areas.

The social setting reflects that condition which indicates the amount of use and social interaction—the amount of contact between individuals or groups. The social setting generally is identified by the evidence of user impact and user density.

The managerial setting provides an indication of the amount and type of administrative action taken to manage current recreation use. This is indicated by the number of user controls and their visibility.

By identifying and applying these setting characteristics, all land and

Table 1*

ROS Setting Opportunities

Primitive	Semi-Primitive Non-Motorized	Semi-Primitive Motorized
Area is characterized by essentially unmodified natural environment of fairly large size. Interaction among users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of man-induced restrictions and controls. Motorized use within the area is not permitted. Large mammals and wildlife species which are not too tolerant of man's presence.	Area is characterized by a predominately natural or natural-appearing environment of moderate to large size. Interaction among users is low, but there often is evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not permitted. Large mammals which are not too tolerant of man's presence.	Area is characterized by a predominately natural or natural-appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted. Wildlife species mid-range between those tolerant of man's presence and those not.
Roaded Natural	**Rural**	**Urban**
Area is characterized by predominately natural-appearing environment with moderate evidence of the sights and sounds of man. Such evidence usually harmonizes with the natural environment. Interaction among users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities. Large mammals tolerant of man's presence; those not tolerant present infrequently. Prevalence of smaller wildlife species.	Area is characterized by substantially modified natural environment. Resource modification and utilization practices are primarily to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of man are readily evident, and the interaction among users is often moderate to high. Many of the facilities are designed for use by a large number of people. Facilities often are provided for special activities. Moderate densities are provided far away from developed sites. Facilities for intensified motorized use and parking are available. Wildlife species limited mostly to those tolerant of man's presence.	Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modification and utilization practices are to enhance specific recreation activities. Vegetative cover is often exotic and manicured. Sights and sounds of man, on site, are predominant. Large numbers of users can be expected, both on site and in nearby areas. Facilities for highly intensified motor use and parking are available with forms of mass transit often available to carry people throughout the site. Wildlife species restricted to those highly tolerant of man's presence.

** This table is for descriptive purposes only. Use the five specific ROS class delineation criteria to identify the actual areas to which these descriptions apply.*

water in the planning area can be classified into one of the six ROS classes described in table 1. The physical, social, and managerial characteristics of the setting are used as indicators of the kinds of experiences the recreationists probably will obtain in each of the classes.

As an integral part of recreation opportunity planning, ROS enables management agencies and the private sector to manage areas for specific experience opportunity objectives. Both the Forest Service and the Bureau of Land Management have developed guidelines for using ROS in their land and resource management planning. As these federal land management agencies move forward with a uniform planning system, the public will be the benefactor because it will receive consistent information about recreation opportunity settings on the major portion of federal lands.

Table 2

ROS Activity Opportunities*

Primitive Semi-Primitive Non-Motorized	Semi-Primitive Motorized	Roaded Natural	Rural	Urban
Viewing outstanding scenery	Viewing outstanding scenery	Viewing outstanding scenery	Viewing outstanding scenery	
Enjoying unique and/or unusual environments	Enjoying unique and/or unusual environments	Enjoying unique and/or unusual environments	Enjoying unique and/or unusual environments	
Hiking	Hiking	Hiking	Hiking	
Cross-country ski touring and snowshoeing	Cross-country ski touring and snowshoeing	Cross-country ski touring and snowshoeing	Cross-country ski touring and snowshoeing	
Horseback riding	Horseback riding	Horseback riding	Horseback riding	
Canoeing	Canoeing	Canoeing	Canoeing	
Sailing	Sailing	Sailing	Sailing	
Other non-motorized watercraft use	Other non-motorized watercraft use	Other non-motorized watercraft use	Other non-motorized watercraft use	
Swimming	Swimming	Swimming	Swimming	
Diving (skin or scuba)	Diving (skin or scuba)	Diving (skin or scuba)	Diving (skin or scuba)	
Fishing	Fishing	Fishing	Fishing	
Photography	Photography	Photography	Photography	
Camping	Camping	Camping	Camping	
Snowplay	Snowplay	Snowplay	Snowplay	
Hunting (big, small game; Upland birds and waterfowl)	Hunting (big, small game; Upland birds and waterfowl)	Hunting (big, small game; Upland birds and waterfowl)	Hunting (big, small game; Upland birds and waterfowl)	
Nature study	Nature study	Nature study	Nature study	
Acquiring general knowledge/understanding	Acquiring general knowledge/understanding	Acquiring general knowledge/understanding	Acquiring general knowledge/understanding	
Unguided hiking	Unguided hiking	Unguided hiking	Unguided hiking	
General information	General information	General information	General information	
		Motor-driven ice and snowcraft	Motor-driven ice and snowcraft	
	Motor-driven ice and snowcraft	ORV touring	ORV touring	
	ORV touring	Power boating	Power boating	
	Power boating		Picnicking	
		Picnicking	Gathering forest products	
		Gathering forest products	Auto touring	
		Auto touring	Downhill skiing	
		Downhill skiing	Water skiing and other water sports	
		Water skiing and other water sports	Automobile camping	
		Automobile camping	Trailer camping	
		Trailer camping	Viewing interpretive signs	
		Viewing interpretive signs	Organization camping	
		Organization camping	Lodges	
		Lodges	Resort-commercial public services	
		Resort-commercial public services	Resort lodging	
		Resort lodging		
			Competition games	
			Ice skating	
			Scooter-motorcycle use	
			Bicycling	
			Spectator sports	
			Jogging	
			Passive use of developed parks and open space	
			Outdoor concerts	

* *These activity opportunities are illustrative only. Specific additions or exceptions may occur depending upon local forest conditions.*

By using the ROS, managers can predict levels and intensity of use within particular areas.

U.S. Forest Service

Table 3
ROS Experience Opportunities*

Primitive	Semi-Primitive Non-Motorized	Semi-Primitive Motorized
Extremely high probability of experiencing considerable isolation from the sights and sounds of man, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman skills in an environment that offers a high degree of challenge and risk.	High, but not extremely high, probability of experiencing the above listed primitive natural environment elements.	Moderate probability of experiencing the above listed primitive natural environment elements, except that there is a high degree of interaction with the natural environment. Opportunity is available to use motorized equipment while in the area.
Roaded Natural	**Rural**	**Urban**
About equal probability of experiencing affiliation with other user groups and isolation from sights and sounds of man. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities associated with more primitive type of recreation are not very important. Practice and testing of outdoor skills might be important. Opportunities for both motorized and non-motorized forms of recreation are possible.	Probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. These factors are generally more important than the physical setting. Opportunities for wildland challenges, risk-taking, and testing of outdoor skills are generally unimportant except for specific activities like downhill skiing, for which challenge and risk-taking are important elements.	Probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. Experiencing natural environments, having challenges and risks afforded by the natural environment, and the use of outdoor skills are relatively unimportant. Opportunities for competitive and spectator sports and for passive uses of highly man-influenced parks and open spaces are common.

* *These experience opportunities are highly probable outcomes of participating in recreation activities in specific recreation settings.*

Obviously, ROS has significant implications for vegetation management. Different types of vegetation will predominate in the different spectrum classes. By using a system such as this, a manager can predict levels and intensity of visitor use within particular areas. From these predictions, appropriate levels of vegetation management and site modification, likewise, can be planned.

Thomas A. Hoots is Leader, Planning and Inventory, USDA Forest Service, Recreation Management Staff, Washington, DC; Leon J. Buist is Associate Professor of Outdoor Recreation, Division of Renewable Natural Resources, College of Agriculture, University of Nevada, Reno. This article was written while Buist was on an Intergovernmental Personnel Act appointment with the Recreation Management Staff.

How to Start a Street Tree Program

by Richard D. Marling

Community involvement and city council action preserved this heritage tree, Umbellularia Californica, by stopping construction and purchasing the tree and lot.

City of San Mateo

For over 15 years the city of San Mateo, California, has had an active street tree management program. Even Proposition 13 did not adversely affect the tree program because of its ability to meet documented needs and maintain high production and work standards.

This article summarizes how to start a similar program. The steps outlined should be used as a general guide only; each agency will have to adapt them somewhat to accommodate local climate, soil conditions, terrain, and citizen needs.

1. Establish Needs

First, assess your area to determine needs and identify particular problems. For instance, virtually every city has sections that lack trees. Many localities have old, potentially hazardous trees that require special care and training. Other places need to protect their trees from the stresses of new construction or redevelopment.

Some old trees have historical value and merit special consideration. Others may be creating problems where their roots have uplifted sidewalks, curbs, gutters, and driveways. Still others may cause traffic hazards due to improper siting or planting.

2. Develop Public Interest

The key to your success is to establish an aura of tree concern within your community. You may wish, as did San Mateo, to set up a community beautification committee to work with the Park and Recreation Commission or directly with your agency. Perhaps an arboretum society, formed with the intention of protecting and furthering knowledge about trees through education of the public, would be beneficial.

Get involved with homeowners' associations. Prepare newspaper articles on special plantings and homeowner hints. Give special talks on tree care at community gatherings. Plan Arbor Day festivities. Organize tours of treeless areas and those with good trees. Distribute handouts on arboreal beautification. All are important in building public awareness.

3. Take an Inventory

Before you can know what to do, you first must know what you have. A tree inventory ideally can be handled as part of your winter program.

Be sure that you train your personnel to record and file data properly. A system that employs block cards that note facts about the trees—such as genus, species, size, condition, location, size of rights-of-way, and obstacles like telephone poles, sidewalks, or curbs—seems to work well. Perhaps even historical analyses of the trees might be included. San Mateo has done considerable preliminary work on computerizing its tree maintenance program, but all other preliminary work outlined here first must be achieved to ensure a successful program.

4. Establish Planting and Maintenance Policies

Your inventory will pinpoint such factors as trees that are hazardous, trees that need training, damage to rights-of-way, and areas that lack trees. Once you have these details, you can begin to develop a planting and maintenance policy or program.

Again, involve local citizens' groups—the arboretum society, the beautification committee, various homeowners' organizations—to intensify the aura you are trying to establish. Input from horticulture schools can provide updated information on planting methods. Your farm advisor can give you valuable field consultation on species availability, new local varieties, and final tree selection. Check, also, with local nurseries for information on locally successful plantings.

Continual training ensures high standards of workmanship. City of San Mateo

In setting up your planting program, keep in mind that when you have a neighborhood planting program, you are developing friends of trees—although, in some cases, a neighborhood program may be more costly than planting under contract. Work out the details of your spraying system to keep your trees clean and free from pests and disease. Also, have a system of removal ready so you can quickly replant, when necessary, with younger and better trees.

5. Enact a Comprehensive and Legal Ordinance

Special expertise is needed to enact a legal ordinance. Seek professional help if you need it. Involve your staff in this step and be sure to consult with other concerned departments such as Public Works or the city attorney's office.

This comprehensive and legal ordinance is only as good as its acceptance within the community. Therefore, make sure that it is acceptable to as many people in the community as possible.

The International Society of Arboriculture has model ordinances that you can use as guidelines. Also, in my opinion, the city of San Mateo has outstanding heritage and street tree ordinances.

6. Develop a Cost Analysis

If you lack information on cost analysis, you can consult other agencies. The information you will need includes the costs of manpower, equipment operation, supporting staff, amortization, replacement of plants, and so forth. As you develop these costs, involve local tree companies and various arborists' associations, as well as interested citizens.

7. Formulate a Street Tree Master Plan

Involve as many municipal departments and local groups as possible. Analyze your city's weather, soil conditions, terrain, obstacles, and types of citizens. Make sure you consider existing trees and other plant life.

At this point, develop your master plan. You might include both an *official* list—tree species to be planted on each block—and a *pending* list of trees that exist now but which you hopefully will remove and replace. The official list should include suitable street trees. Selection of the genus, species, and variety is crucial.

The size of the available planting space becomes important, as does how the trees are to be planted. Be sure to analyze how small, medium, and large trees affect the areas in which they are planted. In some areas, linear planting is desirable; in others, impact and mass plantings may be better considering scenic views and the type of development. In congested areas, cutouts may be better than planting strips.

Gracefully spreading trees can soften and complement many structures. Tall, slender trees may be chosen for areas where view is a prime consideration, while spreading trees may be better suited for flat ranchlands.

Consistency of tree species is helpful as far as maintenance is concerned. However, be sure to use more than one kind of tree in your community to safeguard against potential disasters such as Dutch Elm Disease.

When considering flowering trees, remember that certain people have allergies to some varieties, including the acacias. Also, in selecting trees keep in mind such factors as overhead power lines, wind, sight distances, and other traffic considerations.

8. Implement the Program

As you implement your program, it helps to anticipate some of the problems and details you may en-

Special arboriculture crews maintain the street trees on public rights-of-way.
City of San Mateo

Proper training of young trees establishes future growth habits.
City of San Mateo

counter. Probably your greatest number of calls will concern routine pruning. You also will receive emergency calls. Provide a method of documenting these calls. For routine pruning, you might start in one area, then move on throughout the city, area by area, ideally within a 3–4-year pruning cycle.

Citizen requests in regard to the tree program must be considered because of their immediate need; these requests may conflict with your routine pruning program. It is important that personnel in the office know what has been done and where. A block card system that is accessible to office personnel is one of the best systems available.

You may need to have various applications which can be submitted to the department for removals, trimming, planting permits, even the designation of heritage trees. Heritage trees are those which are special because of their size and/or age. They may stand on private property.

The city of San Mateo has a Board of Zoning Adjustments—with one member from the Park and Recreation Department. This board establishes standard landscape requirements for street trees, and the planting of parking lots and public use areas. The same board also requires landscaping for all developments, except for single family, individual residences. These requirements include landscape installation and maintenance bonds for 18 months.

When considering subdivisions, weigh the desirability of monolithic sidewalks versus separate sidewalks. Also, establish a system of training personnel and inspectors in other departments on the basics regarding trees and ordinances.

Work with the developers regarding the selection, siting, and size of trees. The International Society of Arboriculture has a book on tree evaluations that you might find useful.

9. Give Your Staff Proper Training

It is essential that your staff be well trained. High standards of work must be maintained at all times for tree preservation and cost reduction.

You need to have qualified, trained office staff who can monitor a budget, keep accurate records of work accomplishments, prepare various reports, sensitively handle citizen requests (or demands), and post on block cards various information relative to street trees.

In the field operation, again the key to success is qualified, properly trained personnel. The lead person must be prepared to develop daily reports, schedule and route crews, and deal with the public. The crews must be able to handle such things as special problems, emergencies, and hazards, while keeping up their routine pruning. They must be able to handle special situations, such as trimming sycamores in the winter, and must be able to implement spraying and removal programs as well as do planting as needed.

10. Review and Analyze Your Program

Determine how the costs of your program compare to those of 1) the private sector, and 2) other agencies. Reports and cost analyses of other cities can be helpful. Second, assess your success in attaining the goals you have established.

Third, try to develop some innovation. For example, in new areas, plan to have tree planting easements farther back from the sidewalks, allowing for more root area.

Finally, analyze the possibilities and impact of various federally sponsored programs. You'll particularly want to check CETA, conservation corps, and urban forestry grant programs.

San Mateo's Program

The city of San Mateo, at present, has an arboriculture budget of $197,494 to conduct a program of tree pruning, planting, removal, and spraying. The care of 36,000 street trees and trees in 22 developed parks is accomplished by eight tree personnel, a part-time secretary, and a landscape resources supervisor. Our equipment consists of a one-man lift truck with chipper box, two 1½-ton (1.35 t) dump trucks for chips, two chippers, a stump machine, and one 400-gallon (1514 l) sprayer. We have established a policy of spraying only under heavy infestation, or for elm bark beetle in selected areas.

Major concerns of our arboriculture subprogram are:

1) *Dutch Elm Disease:* Several years ago we initiated a sanitation pruning program for our 1,300 elm trees on public rights-of-way. At the present rate of losing an average of four trees a year to Dutch Elm Disease, the impact on our budget was very light. This type of forward-looking approach has saved our taxpayers money.
2) *Street tree/sidewalk repair program* was started last year. This program consists of removal, replacement, or root pruning trees and relocating broken sidewalks to better accommodate tree roots. Poor trees, or those with poor root systems, are removed and replaced. Large or historical trees are saved if at all possible.
3) *Cost* is a major concern for us as it is for all municipalities. Three years ago a two-block-long area was put out to bid. After establishing an hourly cost for men and equipment (plus overhead), the city, along with private tree companies, bid on the job. The city of San Mateo was low bidder, and completed the project ahead of schedule, saving the taxpayers considerable money.

The above illustrates the importance of having well-trained personnel equal to or better than that of the private sector, to keep budgets low. Citizens seeing high standards of work also tend to keep their private trees cared for accordingly. The end results are better, bigger, and healthier trees for the entire community.

Richard D. Marling is Landscape Resources Supervisor for the City of San Mateo, California. Prior to this he directed the training and research grounds of the Davey Tree Surgery Company in Belmont, California. Mr. Marling also has developed and taught Arboriculture classes for the College of San Mateo.

Managing Recreational Fields of Turfgrass

by John R. Street

A major difference in maintaining turfgrasses for functional and ornamental purposes as opposed to recreational or sport purposes is the degree of traffic. Recreational and sport sites are people oriented. People oriented activities on turfgrass areas imply traffic.

Two major problems associated with traffic on turfgrass sites are wear injury and soil compaction. As traffic intensity increases on sport facilities, there is usually a corresponding increase in both wear injury and soil compaction. Sport facilities are becoming overused as school enrollments increase and as young people and adults of all ages become more interested in athletics and physical fitness.

Turfgrass selection for sport facilities must be based on several key factors including environmental adaptation, intensity of culture, wear tolerance, and recuperative potential. The principal cool-season turfgrasses used on sport turf in the Midwest include Kentucky bluegrass, perennial ryegrass, and tall fescue. Bermudagrass is used to some extent in the South and the southern portion of the Midwest. Whichever type is chosen, soil compaction problems can be minimized by insuring good surface and subsurface drainage and by using various cultivation techniques.

TURFGRASS SELECTION

- **Kentucky bluegrass.**

Adapted to a wide range of environmental conditions, Kentucky bluegrass provides an attractive turf under proper cultural conditions. Kentucky bluegrass exhibits good wear tolerance and recuperative potential. It forms a strong sod that does not tear, slip, or lift easily under the twisting and turning action of foot traffic. Kentucky bluegrass also provides a resilient surface that aids in reducing injury in contact sports.

Many cultivars of Kentucky bluegrass are available. They differ widely in characteristics such as the shade of green, texture, density, environmental and cultural adaptation, and disease susceptibility. The cultivars of Kentucky bluegrass fall into two general groups, those susceptible to Helminthosporium leafspot and those resistant to it.

Cultivars susceptible to leafspot include Park, Kenblue, Delta, and Newport. Helminthosporium organisms cause leafspot and melting-out, both of which are serious disease problems of Kentucky bluegrass in the Midwest. These diseases tend to occur more readily on heavily fertilized turf that is closely mowed.

Good performance can be expected from these cultivars if they are not overfertilized, particularly in the spring, and if they are mowed at a height of 2-2½ inches (5-6.35 cm). Close mowing, high fertilization, and supplemental irrigation are considered advantageous in maintaining good sport turfs. Thus, a dichotomy exists between the use of these latter Kentucky bluegrass cultivars and maintenance regimes to sustain high quality sport turf. In addition, these latter cultivars are not as inherently aggressive or vigorous as some of the newer, improved Kentucky bluegrass cultivars.

Cultivars resistant to leafspot include most of the newer or improved strains such as A-20, A-34, Adelphi, Baron, Bonnieblue, Cheri, Glade, Majestic, Parade, Touchdown, and Victa. These resistant cultivars perform best under a medium to high cultural intensity. Some can tolerate mowing heights of less than 1 inch (2.5 cm). These cultivars are recommended for sport turf areas where medium to high quality is desired or aggressiveness and recuperative potential are essential.

Blending of varieties is a recommended practice when seeding Kentucky bluegrass. A blend is a combination of several cultivars within a species. A combination of 2-4 cultivars is suggested. Unlike a single cultivar, blends provide greater genetic variability, which improves disease resistance and the general adaptation of the turf under differing environmental conditions. Blending superior cultivars allows the desired features of each component to be incorporated while reducing the effects of specific weaknesses on general turfgrass quality.

The performance of any cultivar or blend of cultivars will depend to a large extent on how intensive the culture is. Many cultivars of Kentucky bluegrass perform well when cultured at a moderate intensity. However, as the cultural intensity is increased or decreased, fewer cultivars are well-adapted.

Cultural studies at the University of Illinois using A-20, Fylking, Kenblue, Merion, Nugget, Pennstar, and Windsor indicate that the quality of turfgrass is largely effected by disease incidence, which is related to the mowing height and fertilization rate. For example, low nitrogen rates, especially on closely clipped turf, increase the tendency for the infestation of dollar spot. High nitrogen rates and close mowing, especially during the spring, favor the incidence of Fusarium blight and Helminthosporium leafspot on susceptible cultivars.

In 1975, a study was initiated at Illinois to evaluate the performance of 21 cultivars of Kentucky bluegrass under different cultural intensities (Table 1). After four years, the results of this study indicate that the cultivars vary widely in their adaptation to different cultural regimes. The amount of annual bluegrass invasion is a good indicator of the adaptability of a cultivar to a particular cultural intensity. Brunswick, A-34, and Touchdown are superior at the highest cultural intensity. These cultivars had less than 10 percent annual bluegrass. Most of the cultivars performed well at the intermediate cultural intensities. For example, Glade and Parade had 78 and 47 percent annual bluegrass, respectively, at the highest cultural intensity; whereas, annual bluegrass was only 7 and 8 percent, respectively, at a more moderate cultural intensity (Table 1). Aquilla, Vantage, Birka, and Code 95 provided fair quality and appeared to be better adapted to the lowest cultural intensity. This information suggests that the selection of specific cultivars for blends should take into account the relative performance of Kentucky bluegrass cultivars at the specific cultural intensity intended on the planting site.

Table 1. Annual bluegrass infestation of several Kentucky bluegrass cultivars under several cultural intensities.[1]

Cultivar	Cultural Intensity[2]			
	A	B	C	D
	— % Annual bluegrass —			
A-20	83	21	13	0
A-34	8	0	6	1
Adelphi	47	22	22	12
Aquilla	88	23	12	12
Baron	90	20	15	9
Birka	93	14	18	0
Bonnieblue	63	22	11	4
Brunswick	7	1	1	0
Cheri	82	5	10	5
Glade	78	9	7	0
Majestic	82	33	20	5
Merion	70	9	13	3
Nugget	83	13	22	10
Touchdown	10	4	1	0
Parade	47	2	8	0
Pennstar	92	35	23	18
Sydsport	48	8	7	0
Vantage	88	32	22	18
Victa	57	18	22	8

[1]*Annual bluegrass percentage was determined 4 years after the initiation of treatments.*

[2]*Cultural intensities: A—mowing height at ¾ in. and 8 lb N/1000 sq. ft.; B—mowing height 1½ in. and 8 lb N/1000 sq. ft.; C—mowing height ¾ in. and 4 lb N/1000 sq. ft.; D—mowing height 1½ in. and 4 lb N/1000 sq. ft.*

• **Perennial ryegrass** *(Lolium perenne).*

The cultivars of perennial ryegrass available prior to the late 1960s were not compatible in mixtures with Kentucky bluegrass or acceptable alone for high quality turf. These older cultivars exhibited an upright growth habit, low density, coarse texture, poor mowing quality, short persistence, and light green color.

During the late 1960s, cultivars referred to as improved, turf-type, fine-leaved perennial ryegrasses were released. Manhattan and Pennfine were two of the first cultivars described as turf-type perennial ryegrass. Additional turf-type perennial ryegrasses on the market today include Birdie, Blazer, Citation, Caravelle, Dasher, Derby, Diplomat, Fiesta, Loretta, Omega, Pennant, Regal, Yorktown, and Yorktown II.

These new cultivars are referred to as "turf-type" because of their higher turf density, improved mowing quality, longer persistence, better disease resistance, slower rate of vertical shoot growth, darker color of green, and finer leaf texture than the older perennial ryegrass cultivars like common and Linn perennial ryegrasses. These turf-type perennial ryegrasses have challenged the traditional image and use considerations of perennial ryegrass and increased its acceptability.

A traditional advantage of perennial ryegrass is its quick germination and establishment rate. Perennial ryegrass can germinate within 5 days with favorable moisture and temperature. A good turfgrass cover should develop within 3-4 weeks under optimum weather and maintenance conditions.

The rapid establishment characteristics have made the perennial ryegrasses extremely desirable where quick cover is needed for soil stabilization, repair of damaged athletic fields and golf course tees, temporary cover during unfavorable growing weather, and customer satisfaction. Perennial ryegrass commonly is used for annual overseeding on sport turf, such as tees and athletic fields, where heavy traffic and continual use limit the time needed to establish other cool-season turfgrasses.

In addition, the plant vigor of the turf-type perennial ryegrasses enhances their establishment success under adverse moisture conditions, within thatch, and in moderately compacted soils that normally result in failure for other species. Under these less than optimum growing conditions, perennial ryegrass sometimes is used as an annual or semi-permanent turfgrass. The improved characteristics and rapid establishment also make the turf-type ryegrasses good competitors against annual bluegrass in overseeding programs. Indeed, the turf-type perennial ryegrasses commonly are confused with Kentucky bluegrass.

The rapid germination and vigorous seedling growth of perennial ryegrass is a concern in species mixtures due to ryegrasses' potential domination if it is seeded too heavily or comprises too high a weight percentage of the mixture. In Illinois studies, combinations of Kentucky bluegrass and perennial ryegrass at different percentages by seed weight (such as 5, 10, 15, 20, 25, or 50 percent perennial ryegrass) yielded different proportions of the two species, varying with cultivars selected. For example, A-34 Kentucky bluegrass was more competitive than Fylking. Pennfine perennial ryegrass was more competitive than Citation. The differences were most striking at the 5-percent level of perennial ryegrass in the seed mixture. After 3 years, the Pennfine-Fylking mixture was nearly 50 percent perennial ryegrass, while the A-34 Citation mixture was less than 5 percent perennial ryegrass. Less than 20 percent perennial ryegrass occurred in stands resulting from 50:50 mixtures of A-34 and Citation by seed weight. Thus, where Kentucky bluegrass predominance is desired, the selection of less aggressive perennial ryegrass cultivars and more aggressive Kentucky bluegrass cultivars should be considered.

A general standard has been to include 10-20 percent ryegrass in Kentucky bluegrass mixtures for establishment. The final percentage of perennial ryegrass, however, will vary depending on both the perennial ryegrass and Kentucky bluegrass cultivars selected. In contrast, the more aggressive perennial ryegrass cultivars may be a better choice for overseeding programs on established turfgrass sites.

Wear tolerance of the turf-type perennial ryegrasses is considered good to excellent. Mixed with Kentucky bluegrass, these cultivars are performing satisfactorily on sport turfs and other areas of heavy traffic and in overseeding programs on sport turfs. The recuperative potential and surface-matting characteristics of perennial ryegrass, however, fall below that of Kentucky bluegrass. Recent research indicates that perennial ryegrass does not exhibit the lateral healing potential of Kentucky bluegrass (Table 2).

Table 2. The 50-day lateral growth recovery of several Kentucky bluegrass and perennial ryegrass cultivars during the summer of 1975.

Cultivar	Portion of Artificial Divot Healed
	— % —
Merion	89
Baron	82
Kenblue	75
Derby	30
Manhattan	27
NK-200	13

Hall, J. R. 1978. The Perennial Ryegrasses—Understanding Their Capabilities and Limitations. 1978 Ohio Turfgrass Conference Proceedings.

The tillers of the turf-type perennial ryegrasses grow in a semiprostrate fashion. Several cultivars have been observed to produce subsurface tillers that emerge from the soil several inches from the parent plant. This semiprostrate growth habit is one characteristic that enables perennial ryegrass to tolerate somewhat lower mowing heights than Kentucky bluegrass. They appear to tolerate mowing heights of ½ inch (1.27 cm) during the cooler periods of spring and fall and ¾-1 inch (1.9-2.5 cm) during the summer. The mowing quality of the turf-type perennial ryegrasses, however, is not quite equal to Kentucky bluegrass, especially during the months of June, July, and August. Loretta appears to exhibit the best mowing quality characteristics during cool weather.

Additional disadvantages of perennial ryegrass that have been observed under research and field evaluations are: Disease susceptibility, poorer summer and winter hardiness relative to Kentucky bluegrass, and lack of long-term drought tolerance. These latter factors are considered the major drawbacks to the use of perennial ryegrass monostands.

The perennial ryegrasses are inherently weak against the *Pythium* and *Rhizoctonia* diseases. Pythium blight is a serious threat to seedling stands of perennial ryegrass and established stands during hot weather, especially in low or wet areas. The Rhizoctonia brown patch disease, favored by warm, humid weather and high nitrogen fertility, can frequently cause serious damage to perennial ryegrass. Brown patch has been observed to cause serious thinning of perennial ryegrass stands in southern Illinois. Information from Rutgers University indicates that some perennial ryegrass cultivars are less susceptible to brown patch than others. The turf-type perennial ryegrasses also are susceptible to dollar spot, snow mold, red thread, rust, and leafspot.

The summer heat tolerance, drought tolerance, and winter hardiness of the turf-type perennial ryegrasses are considered to be below that of Kentucky bluegrass. In general, the newer perennial ryegrasses have exhibited good short-term drought tolerance. Initial evaluations suggest that they have less ability to withstand a prolonged drought than Kentucky bluegrass.

Some of the turf-type ryegrasses showing significant improvements in heat tolerance and summer performance are Pennant, Citation, Pennfine, Birdie, Yorktown II, Diplomat, Omega, Fiesta, Dasher, Blazer, Derby, and Regal. Those ryegrasses exhibiting significant improvements in winter performance include Manhattan, Yorktown II, Yorktown, Omega, Loretta, and Diplomat (1, 3). In Illinois trials, Manhattan has performed best during the cool periods, and Pennfine has performed best during the warm periods.

• **Tall fescue** *(Festuca arundinacea).*

Tall fescue traditionally has been used as a low maintenance turfgrass in the Midwest. It tolerates soils of low fertility and has excellent resistance to summer heat and drought. Tall fescue's ability to tolerate low maintenance regimes and its excellent wear tolerance make it a possible choice for low maintenance athletic fields and other recreational sites.

For acceptable turf quality, a heavy seeding rate of 6-8 pounds (2.72-3.63 kg) per 1,000 square feet (9 m^2) is recommended. This will produce a dense turf that helps to compensate for the lack of rhizomatous and stoloniferous growth. Tall fescue is prone to low temperature injury, which is a major drawback to its use in the cooler portions of the cool humid region. "Kentucky 31" tall fescue is the most widely available and acceptable tall fescue cultivar presently available.

• **Bermudagrass** (*Cynodon* spp.).

Bermudagrass is a warm-season turfgrass used frequently for sport facilities in the southern United States. Bermudagrass provides a good playing surface for athletic fields because of its excellent wear tolerance and recuperative potential. Bermudagrass dormancy in the fall and early spring can result in thinning of athletic turfs subject to concentrated traffic at these times. The heat and drought tolerance of the bermudagrasses are excellent, but poor cold tolerance has severely limited its widespread use in the southern portions of the Midwest. Midiron is the cultivar with the best winter hardiness. Tiflown, Tifway, and Tufcate are bermudagrass cultivars that are utilized on athletic fields in the southern United States.

PERENNIAL RYE GRASS

GIANT RYE GRASS

MAINTENANCE OF TURFGRASS

Whatever type of turfgrass is selected, certain maintenance procedures will help preserve its quality and prevent common problems.

Overseeding of New Grasses

Football fields commonly are overseeded with new grasses in the fall after play has been completed or in the early spring. Planting methods presently used for overseeding or introducing new grasses onto sport facilities include broadcast seeding following vertical mowing and/or core cultivation, and slit or disc seeding. Whichever overseeding method is chosen, in the site preparation it is critical to expose sufficient soil to provide a good seedbed for germination and maximum seedling survival.

A common mistake in renovation operations is seeding on or within the thatch layer. Thatch—organic matter layer at the soil surface—is a poor growing medium not only for established turf but also for young turfgrass seedlings; it has poor moisture-retention characteristics compared with soil, and repels water readily once it becomes dry. Thus, the moisture characteristics of thatch are undesirable for seedling survival. Seeds distributed on or within thatch may germinate, but they commonly die during the initial seedling stage because of inadequate moisture availability. *Thus, a cardinal principle in renovation is to reduce and penetrate the thatch layer to expose the underlying soil for seed or vegetative materials.*

- *Vertical mowing and core cultivation.*

Vertical mowing (dethatching)—cutting into the turf and physically removing excess vegetation and organic debris—may require several passes over an area before sufficient dead vegetation and thatch are removed to ensure proper seed-soil contact. Thatching machines should be adjusted to cut through the thatch and loosen or penetrate the underlying soil to a depth of ¼-½ inch (0.635-1.27 cm) or more. The best solution to serious thatch problems may be to remove the turf with a sod cutter and reestablish grass on the bare soil.

Vertical mowing is commonly preceded or followed by core cultivation. Spoons or tines are inserted into the soil, and soil cores 2-4 inches (5-10.16 cm) long are brought to the soil surface. The soil cores are broken up by a light dragging or vertical mowing of the area. The loosened soil material is distributed across the soil surface and introduced into any remaining organic debris that might be present at the surface. It acts as a light topdressing, further enhancing seed-soil contact. Core cultivation alone usually requires at least 8-10 passes over an area to disturb the soil sufficiently before overseeding.

- *Slit or disc seeding.*

Seeders that provide for vertical mowing and seeding in one operation now are available. These devices have vertical slicing knives in front to remove excess vegetation and loosen the soil surface. Next, free-rotation coulters cut slits into the existing sod. Seed then is dropped into the slits through seed distribution tubes.

This method, referred to commonly as slit or disc seeding, is an excellent method of assuring good seed-soil contact and is very efficient in terms of labor and seed requirements. An obvious advantage is that overseeding can be accomplished with minimal disturbance to the turfgrass area. The success of this method is reduced where too much thatch exists or where soil compaction is severe.

The best time for turfgrass overseeding in the Midwest is during the late summer to early fall. Temperature, moisture, and water loss rates are highly favorable for germination and seedling survival at this time. Sport and recreational turfs that are under intensive use during the fall period should be overseeded as early in the spring as possible. Late fall overseeding of cool-season grasses has proven successful on most midwestern athletic fields.

Suggested seeding rates for broadcast and disc seeding of Kentucky bluegrass blends are 2-3 and ½-1 pounds (0.9-1.36 and 0.23-0.45 kg) of seed per 1,000 square feet (92.9 sq cm), respectively. Dragging or raking the area following seeding is

recommended to cover seeds and to try to carry seeds into slits or holes produced by vertical mowing or coring. The area then should be thoroughly irrigated to a depth of 6 inches (15.24 cm) and surface moisture maintained during the germination and establishment periods. Nitrogen fertilizer can be applied lightly 3-5 weeks after seeding to enhance the establishment rate. Activity should be limited on the renovated area for at least 4-6 weeks after overseeding.

Soil Compaction

Compaction is one of the main problems of athletic field turf. Compacted soils are characterized by poor aeration and drainage, low water-infiltration capacity, shallow root growth, and reduced turf quality. Such soils are typically dense clay that has been subjected to concentrated traffic.

Soil compaction can be reduced by mechanical cultivators that create openings into the underlying soil, thus facilitating the movement of air, water, and nutrients. Cultivation should be practiced during cool weather, when an extended period of active growth follows. Two principal types of mechanical cultivators are coring machines (aerators) and spikers.

Coring machines remove small soil cores, ¼-1 inch (.635-2.5 cm) in diameter, and deposit them on the surface of the turf. The cores then are broken up and distributed uniformly over the turf by a heavy steel mat or section of chain-link fence. The soil should be moist, but not wet, during the coring operation, so that the hollow tines can penetrate the soil to their maximum depth of 2-4 inches (5-100 cm).

Spikers and slicers employ solid knives, which create narrow openings in the lawn. While not as effective as coring machines for reducing soil compaction, they may improve turf quality.

Soil Drainage

The accumulation of excess water on athletic fields increases the tendency for soil compaction, reduces field playability, and increases the possibility of serious player injury. Proper surface and subsurface drainage will reduce maintenance problems and maintenance costs. On sand fields, drainage of excess surface water will usually be sufficient. On heavy soils such as silt and clay, surface (contouring) and subsurface (tiling) drainage techniques are usually necessary.

Effective surface drainage is most important on athletic fields constructed on heavy soils. Good contouring of the surface will aid substantially in reducing compaction by providing rapid removal of excess surface water. Football fields should be designed to provide a 12-18-inch (30-45-cm) crown sloping uniformly from the center of the field to the sidelines. Tile lines should be placed along the sidelines with catch basins appropriately located to remove water rapidly. Soccer and baseball fields should be constructed with a crown having a maximum of 1 percent slope to sidelines. Tile lines and catch basins also can be used to ensure rapid water movement. Baseball outfields should be graded to a 1 percent slope from the center in all directions.

Subsurface drainage consists of installing tile lines below the soil surface to aid in percolation or movement of water to deeper soil levels. On heavy soils, tiling may be of little value because the surface compaction impedes water movement into the tile lines. Heavy soils must be modified with sand or other coarse material if subsurface tile drainage is to work properly.

Inadequate drainage on existing fields built on heavy soils may be improved by placing vertical trench drains within the field and along the sidelines. The slit trench technique involves a trench 2-3 inches (5 to 7.5 cm) wide and 2-4 feet (61-122 cm) deep. A vertical column of gravel or coarse sand is placed in the trench and filled to the soil surface, which is left open. Tile lines can be placed at the base of the slit trench to insure rapid water movement. Skinned baseball fields also can be sanded to enhance surface drying; apply the sand lightly to the soil surface. On low maintenance fields, trenching and sanding will be more economic alternatives to reconstruction.

In conclusion, the degree of maintenance on athletic fields is dependent to a large extent on proper turfgrass selection, cultivation, and adequate drainage. Properly adapted turfgrasses will better withstand player traffic and therefore persist for a longer period of time. Overseeding periodically will help to strengthen the stand. Timely cultivation and good drainage will ensure an adequate soil environment for healthy grass growth and maximum quality.

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Evolution of a Policy for Vegetation Management

by John Nicoles

The East Bay Regional Park District is an independent, property-tax-supported, special purpose government, which provides generally large-scale parks to Alameda and Contra Costa counties on the eastern shore of San Francisco Bay. Today the park district's political boundaries encompass close to 1,000 square miles (2,600 sq km) in which the district operates over 50,000 acres (20,350 ha) of parkland in 42 separate units ranging in size from just under 50 to nearly 6,000 acres (20 to 2,400 ha). In addition, a number of interpark trails serve to stitch the parks together.

The topography of the park district is generally aligned on a northeast/southwest axis. Along the western edge is the San Francisco Bay shoreline. To the east lies a strip of gradually rising piedmont ranging in width up to 2 miles (3.2 km). From the east of the piedmont rises a ridge of hills, generally to about 1,200 feet (365 m) in elevation, but with individual peaks in excess of 2,000 feet (609 m). In its midportion, this ridge is referred to as the "Berkeley-Oakland Hills," after the cities that occupy its western slopes and the majority of the piedmont below.

East of the Berkeley-Oakland Hills lies a series of north-south ridges and intervening valleys of various sizes, which shelter a number of interior towns and cities. East of these ridges, and beyond the park district's eastern boundary, lies California's famous central valley.

Early Efforts

Even before the park district existed, rudiments of a vegetation management policy for the area could be seen in a document known as the "Olmstead-Hall Report."

Prepared in 1930 by Ansel Hall, then chief naturalist for the National Park Service, and Frederick Law Olmstead, Jr., the report recommended that some 10,000-11,000 acres (4,000-4,400 ha) of surplus public watershed lands in the Berkeley-Oakland Hills be used for parks, and that:

> the greater part of the proposed park be retained in its present attractive 'natural' condition. By carefully planning the management of its forests and open grasslands the area can year-by-year be made more attractive for park purposes at comparatively low costs, provided the vegetation native to the region is protected or re-established where necessary.

One of the administrative possibilities suggested in the report was the establishment of a special purpose agency to acquire this surplus land and administer it as parkland. Thus, the East Bay Regional Park District was born.

In 1940, the park district prepared a master plan—its first formal effort to define its directions and, among other things, establish a vegetation management policy. The technical staff employed on the plan included a landscape architect, an engineer, a draftsman, and a forester. This technical staff was assisted by representatives from the National Park Service and the Civilian Conservation Corps. Evidently there were no public hearings.

The 1940 master plan consisted of five segments: a generalized development outline and four specific plans, one for each of the district's four parks—Tilden, Temescal, Roundtop, and Redwood. A General Fire Plan, prepared by the Park Service in 1936, was included, as was the Olmstead-Hall Report.

The development outline established that Tilden Park and Temescal Park were to be developed for intensive recreational use, while Redwood Park and Roundtop Park were to be retained in a more primitive state. Under the heading "land status," the outline stated:

> The Master Plan contemplates the preservation of typical California landscape, the natural park values, and the protection of the flora and fauna which are so commonly destroyed by the advance of civilization.

Freeze-damaged eucalyptus 18 months after freeze. Sprouting has occurred on some trunks; others are dead to ground level.

John Nicoles

Aerial view of Robert Sibley Regional Preserve 5 months following freeze. Cleared "fuel break" in mid-ground. Damaged eucalyptus in background is a serious fire hazard.

John Nicoles

Regarding Redwood Park, the plan noted:

> In the northeasterly or upper end of the valley there are about 300 acres (120 ha) which were planted some years ago to eucalyptus. The variety used is quite tender and many of the original trees have been killed by frost and snow. In their place have sprung up dense second and third growth which in its present state creates a fire hazard. It is proposed to gradually eliminate these trees and replant with Monterey Pines and Redwoods in the canyons, and Live Oaks.

The 1940 master plan appears to have contained no provisions for updating. In retrospect, this was an interesting omission, for the plan stood as the only official park district master plan until the end of 1973.

During the 1960s, substantial acquisitions and annexations more than doubled the park district's land. In spite of dramatic increases in property tax income, the costs of new acquisitions, necessary development, additional staff, and general inflation threatened to surpass the park district's income. By the end of the decade, a tax levy increase was clearly necessary. In authorizing the levy, the California State Legislature withheld a portion of the requested increase pending the district's submission of a new master plan that "spelled out its acquisition and development goals."

Master Plan

Although the resulting 1973 master plan is oriented primarily toward land acquisition and development, certain acquisition policies affect vegetation management. The plan recognized that the park district must categorize parks to ensure acquisition of an appropriate mix of park types.

In defining the categories, reference is made to the vegetation of the parklands and the objectives for vegetation management. Regional parks, wildernesses, and preserves are to have a high percentage of "natural" open space (extensive use areas), while regional recreation areas and shorelines are candidates for more intensive recreational development.

In addition, the 1973 master plan establishes the following park planning sequence:

1) *A (pre) Acquisition Analysis*—to ensure compliance with acquisition guidelines.
2) *A Resource Analysis*—in which significant natural resources are identified and "a potential plan for vegetation and wildlife management" is prepared.
3) *A Land Use-Development Plan*—in which the general land uses and the boundaries between intensive and extensive use areas are established.
4) *A Capital Improvement Plan.*

Thus, the master plan provides for identification of and planning for significant natural resources before capital improvements are made. The general guidelines for extensive use areas remain similar to those of 1940, emphasizing "natural" vegetation, with associated intensive use areas blending into their natural surroundings.

Sharper Focus on Vegetation

The 1973 master plan was the product of 3 years' work from 1971 to 1973. During December 1972, in the middle of the planning process, the Bay Area experienced a natural event which forced the park district to focus more closely on its vegetation policies. A severe week-long freeze left considerable vegetation damage. Many desert and tropical landscape plants were destroyed, and throughout the Berkeley-Oakland Hills the eucalyptus crowns all turned brown.

In light of California's "Mediterranean" climate, this destruction took on ominous significance. Summer drought and hot, dry, east winds that blow in the late summer and fall, traditionally leave the area vulnerable to wildfires.

Understandably, both official and popular concern grew about the magnitude of the fire hazard which the apparently dead eucalyptus crowns would represent when the late summer fire season arrived. After considerable political discussion, the federal government agreed to fund the removal of a 300-foot wide (90 m) band of eucalyptus from the crest of the Berkeley-Oakland Hills. This created a "fuel break" between the residential areas on the western slope and the forested lands to the east.

Power Wagon 6—a typical Park District off-road fire truck. Dependence on off-road equipment can be reduced by a vegetation mosaic and a fire control support system that anticipates and mitigates the spread of fire.
John Nicoles

Sprouting has occurred on trunks and main limbs of both trees. Larger tree represents a serious limb fall hazard along the road.
John Nicoles

For practical purposes, the project virtually cleared 300 acres (127 ha) of parkland. Subsequently, the park district elected to make further removals from interior areas to break up the continuity of the eucalyptus forests, and to create protective zones around park facilities. Thus, massive vegetation changes were made in a significant portion of the park district. Accordingly, in September 1974, the Park District Board of Directors requested that vegetation management plans be prepared for the four parks effected by these changes. A planning team of 12 staff members was formed, representing the fields of interpretation, landscape architecture, forestry, fire control, and park operations. The team was assisted by six individual consultants representing the same general disciplines.

By the time the planning team started work, the 1973 master plan had been completed, adopted, and published. Review by both team members and consultants made it clear that more detailed policy regarding vegetation management objectives would have to be developed to supplement the master plan's broad references to "natural" conditions.

To What Extent "Natural"?

The concept of a "natural landscape" has both popular and scientific definitions. Both definitions attempt to describe a landscape that has not been disturbed by man. The scientific approach is to identify the biotic community which actually would occur on a given site without man's influence. The popular approach is less concerned with biological correctness than with the appearance of an undisturbed condition; a popular natural landscape typically would be described as the absence of symbols (such as structures, roads, or machinery) of human presence.

While the scientific and popular concepts of "natural" may be complementary, they often conflict. One source of conflict arises from the fact that some level of human activity must be accepted as natural, but the appropriate bounds on that activity are quite subjective.

A second, and perhaps major, source of conflict between the popular and scientific viewpoints arises when the existing vegetation is not the agreed upon natural landscape, and re-creation is necessary. This occurs frequently due to such human influences as introduction of plant species, reduction of native wildlife habitat, and fire suppression policies. The re-creation process disrupts the existing, apparently undisturbed condition, and upsets proponents of the popular view.

In spite of these problems, a biologically correct landscape does offer a major benefit: it is composed of indigenous species; that is, plant varieties which have evolved in association with the local climate, diseases, and pests. Indigenous plants are more resistant than introduced ones to occasional local peculiarities such as weather extremes. Therefore they are less susceptible to large-scale damage. The eucalyptus damage resulting from the 1972 freeze is a case in point.

In preparing the vegetation management policy, the park district planning team attempted to integrate both biological and popular considerations within the overall concept of "natural" as suggested by the 1973 master plan. The effort was made to emphasize scientifically based decisions, while recognizing the realities of a public agency functioning in a popularly oriented society.

Underlying Philosophy

It is the park district's philosophy to provide front-line managers with necessary resources (including information) and allow them to make the decisions in running their assigned parks. Therefore, few of the policies are written as strict rules. In most cases room is left to apply local judgment. To assist that judgment, the biologic principles behind the policies are discussed at considerable length, so that the policy document can serve as a vegetation management text—hence, the document's title: "Vegetation Management *Principles* and *Policies*" (emphasis added) for the East Bay Regional Park District.

added). The chapter on fire control is included here to illustrate the principles/policies format used.

The major objectives of the vegetation management policies are to create and maintain natural or naturally appearing vegetation, to minimize buildups of vegetation that would constitute undue fire hazards or maintenance problems, to provide animal habitat, and to support recreational use of the land.

One section is devoted to a biologically sound definition of indigenous vegetation and establishes a policy of favoring indigenous vegetation in both planting and removal projects. While the park district may engage in some large-scale conversion work, it is recognized that gradual changes are less disruptive, both biologically and popularly. In deference to this principle, as well as to economics, it is anticipated that most vegetation changes will be made on an opportunity basis when some other circumstance demands that plants be removed or added. The purpose of the vegetation policy is to direct the district toward a biologically sound landscape whenever an opportunity arises.

Evaluation

Has the adoption of "Vegetation Management Principles and Policies" been effective? Yes, no, and it's too early to tell. By the time the policies were adopted in November 1976, the park district's planning department had initiated use of the planning sequence established in the 1973 master plan. The sequence (except for the acquisition analysis) was to be applied to existing, as well as new, parks. Overall resource management planning thus was incorporated into the larger planning process, and no vegetation management plans for individual parks were ever completed by the planning team. The policies that the team developed, however, have become an integral part of the district's planning process. In this regard, the policy has been effective.

In the field, where the day-to-day decisions are made, there is evidence that the document has not been widely read or understood. It is apparent that employee awareness and understanding could be improved by instituting some form of training sessions. In this regard, the policy appears less effective than desired.

Finally, the kinds of changes the district would like to effect will require decades (at least) to accomplish. For this reason, the final analysis cannot be made for a long time.

John Nicoles is a registered professional forester in the state of California and Land Management Specialist for the East Bay Regional Park District. He was coordinator and the principal author of "Vegetation Management Principles and Policies." Copies of "Vegetation Management Principles and Policies" are available for $2 each from the East Bay Regional Park District, 11500 Skyline Boulevard, Oakland, CA 94619.

Vegetation Fire Control at East Bay

From "Vegetation Management Principles and Policies," East Bay Regional Park District.

1. **Background and General Principles.**

   Although a prime visual, habitat, and recreational resource, vegetation is also a prime fire hazard. While this hazard cannot be eliminated (short of eliminating most of the vegetation), proper design of the vegetation mosaic can simplify wild fire suppression and minimize the probability of a major wild fire developing. The principles involved relate to well-understood fire behavior and established suppression techniques.

   a. *Heat rises; the heat rising from a fire dries out and preheats the fuels located above (uphill from) the fire.* For this reason, fire moves much more rapidly up a hill than it does across or down a hill. Often it is nearly impossible to suppress a fire on its uphill edge until it reaches the top of the hill and the terrain flattens out. It is a common firefighting practice to stage fire suppression efforts along ridge lines, without attempting to suppress the fire on the hillside.

   b. *Fuel (vegetation) type influences the character of a fire.* Light fuels (grass, leaves, small twigs) are more easily ignited and burn faster than heavier fuels (large limbs, tree trunks); however, they generally generate less heat. A fire in ground level fuels is more accessible for suppression efforts than a fire in high brush or treetops. Although fire can spread

from airborne burning particles, it most commonly spreads (either vertically or horizontally) through continuous fuel.

c. *Fuel moisture influences the character of a fire.* Vegetation which requires little moisture is generally dryer and more flammable than species which are green and moist all year round. The relationship between vegetation and topography means that south- and west-facing slopes are generally the most flammable.

d. *Winds influence fire behavior.* Wind can drastically increase the intensity of a fire by force-feeding oxygen to the combustion process just as a bellows does. Wind also carries heat from the fire to non-burning fuel, drying it out, and preheating it so that it ignites and burns more easily when the fire reaches it.

When a wind develops which blows into an already burned area, it becomes a major aid in extinguishing the fire. A strong wind can overcome a fire's tendency to progress uphill. Due to diurnal temperature changes, local winds can be expected to blow up canyon during the day and early evening, and down canyon during the night and early morning. Local winds are sometimes overpowered by more general prevailing winds.

During most of the fire season in the East Bay area, prevailing winds are from the west (tending to push fires eastward); however, during late summer, strong east winds are common. The significance of the east winds is that during the most intense period of the fire season, from a temperature and moisture standpoint, fire hazard is magnified by a wind pattern which could bring fire into the District lands from the watershed areas to the east, or drive a fire from parkland into the heavy residential areas to the west.

e. *Fire suppression is dependent upon eliminating at least one of the elements essential for fire: fuel, oxygen, and heat.* Traditional suppression techniques employ water to reduce heat and cut off oxygen, and roads and firebreaks (strips of bare earth surface) to eliminate fuel. Fuelbreaks, which are strategically located zones in which fuel (vegetation) is controlled (not eliminated) and access provided in order to simplify suppression, are of significant value in containing and extinguishing wild fires.

2. **Policies.**

a. *Wild fire is both dangerous and destructive, and the occurrence and magnitude of wild fires must be minimized within the Regional Parks.*

b. *Planning (both Land Use-Development and Vegetation Management Planning) must recognize the principles of fire behavior and control to minimize the impact of wild fire.*

c. *Specific control and suppression measures which should be considered and may be recommended include:*

1) Vegetation-type conversion to reduce difficulty of suppression.
2) Break-up of horizontal fuel continuity through:
   a) Thinning or removal of forest stands.
   b) Construction of access roads, firebreaks, or fuelbreaks.
3) Break-up of vertical fuel continuity through removal of fuel between ground level and crown level, i.e., pruning of lower tree limbs and removal of brush, vines, or young trees as necessary and appropriate.
4) Regularly reduce or eliminate ground fuel build-up through:
   a) Recreational development.
   b) Grazing.
   c) Prescribed burning.
   d) Chemical treatment.
   e) Mechanical removal.
5) Provide access suitable for fire-fighting equipment.
6) Maximize water availability through:
   a) Formal distribution systems.
   b) Development of natural water sources.
   c) Installation of static storage (cisterns).

d. *Because construction of fire control systems tends to be disruptive to both vegetation and animals, such systems should be carefully designed to minimize the amount of area receiving heavy treatment.*

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Trends in Vegetation Management

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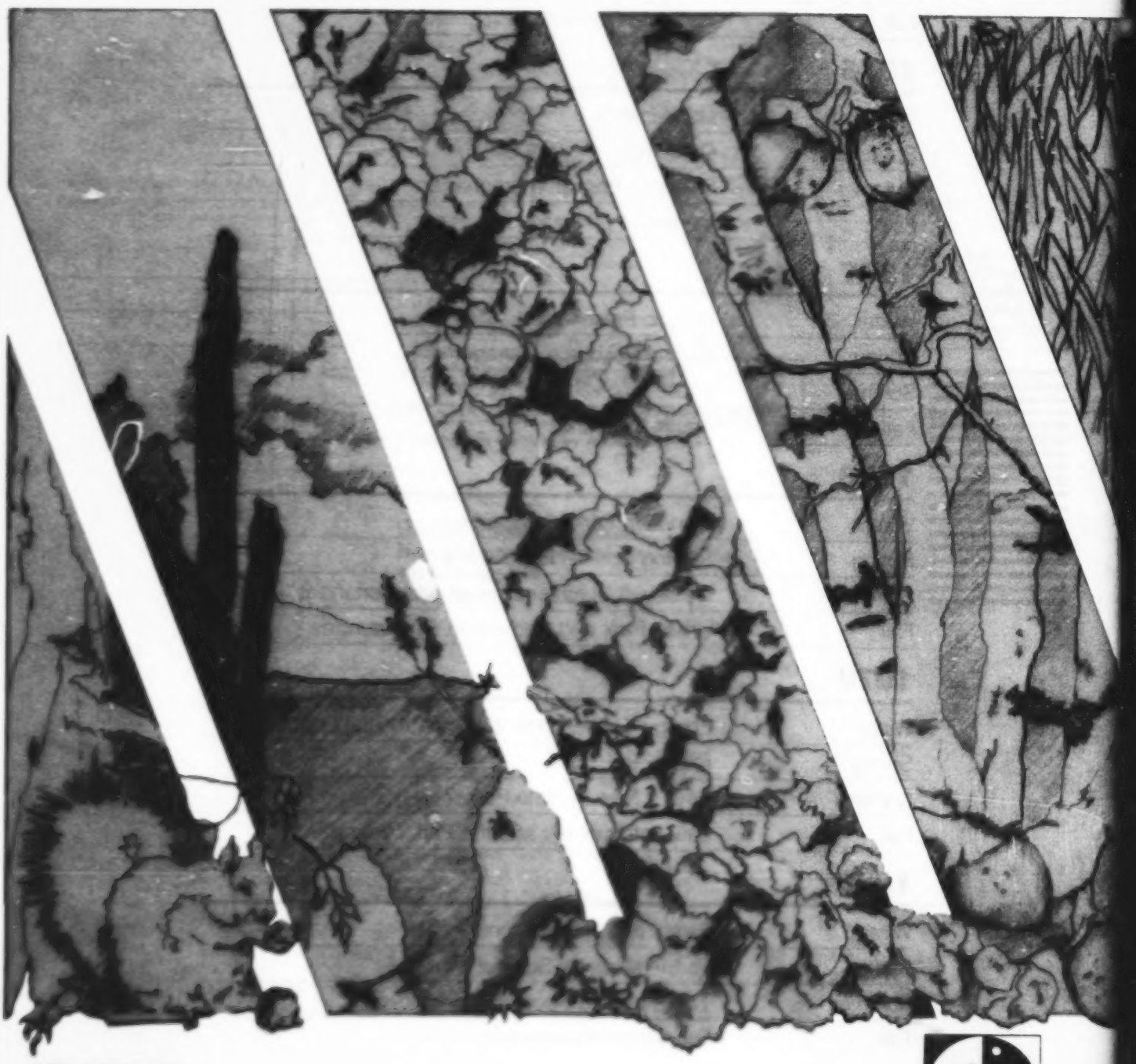

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